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NUMBER SECOND,

REMARKS ON THE

FIRST VOLUME
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Mr. BENJAMIN BELL's suivi
SYSTEM OF SURGERY.

Having now refolved to review thundrks of the Royal College of Surgeons, from the days of Penicuick to thofe of Jonathan Bell, from the Medical Effays down to the Yellow Fever, I have thought fit to adopt' a motto in fome degree expreffive of the danger of my undertaking; and I applied to my, friend Sydrophell for a tranflation.

Pinge duos angues : Pueri, facer eft locus ; extra Mejete.

Pifs not, rude boys, on facred ground,
Beware that deadly fin;
Where ferpents are the fign without, You'll guefs what lurks within.

## NUMBER SECOND,

## BEING

## R E M A R K S

ON THE

## FIRST VOLUME

$0 F$
Mr. BENJAMIN BELL's
SYSTEM OF SURGERY.


Pinge duos Angues. Pueri, sacer est locus: extra. Mejite.

AGITATIONE PURGATUR.

## LONDON:

PRINTED IN THE YEAR MDCCXCIX.
为

## ADVERTISEMENT.

" Now is the axe laid to the root of the trees, and every tree " which bringeth not forth good fruit will be hewn down."

## ERRATA. Dowplave ir

Page before the fifty, for mejete, read mejite.
Preface, page vi, for cogienl read logical.
Page 20, line 13, for alteration, read alliteration.
Page 38, for ferion, rand Serious.
Page 62, for as your own chatty, 1 . (our charter!
Page 86, for curious nor rant for fir l fer more.
Page reg, for fatling, read a
Page 143, for nucleus, read nucleus
Page 172, for " in proportion to his intelligence will his improvement
be," reed for in proportion to his intelligence will his amazement be v
Page 168, 8 th line from the bottom, dole fo,

> \&c. \&c. \&c.
termed Necrosis.

## No. 5. Letters on Medical Education.

No. 6. A Review of Mr. Benjamin Bell's Book on the Venereal Difeafe.

No. 7. Literary Anecdotes.
No. 8. A Review of a Syftem of Chemiftry, tranflated from the French by Soc: Ie: Au-thors-Critics-Lecturers-Reviewers-Governors of So-cieties-Directors of the Confciences of Youth-Doctors in Phyfic and Phyfiology-and Doctors of the Modern S- R-NNE.

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## ADVERTISEMENT.

" Now is the axe laid to the root of the tree3, and every tree " which bringeth not forth good fruit will be hewn down."

May it be allowable for the Author of thefe Criticifms to fuppofe the world anxious to know what future works he has projected.

No. 3. A Vade Mecum for Surgical Students, teaching, not Surgery, nor furgical difeafes, but furgical operations, the laft new flourifh of the knife, and the steps, as they are called, of the feveral operations, fo as to enable them to perform the Minuet at Surgeons Hall.-Dedicated to my Friend Sydrophell.

No. 4. An Effay upon a Certain Difeafe of the Bones, termed Necrofis.

No. 5. Letters on Medical Education.
No. 6. A Review of Mr. Benjamin Bell's Book on the Venereal Difeafe.

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No. 8. A Review of a Syftem of Chemiftry, tranllated from the French by Soc: Je: Au-thors-Critics-Lecturers-Reviewers-Governors of So-cieties-Directors of the Confciences of Youth-Doctors in Phyfic and Phyfiology-and Doctors of the Modern S-R-NNE.


## DEDICATION

TO THE
AUTHOR OF THE SYSTEM OF SURGERY.
—Pone fuperbiam Ne currente retro funis eat rota.

Honoured Sir,

There are beauties in your works, which, though familiar to thofe of your own profeffion, the world has hitherto had no tafte of. You muft have felt very feverely the hardfhip of being known only as a furgeon, when you are fo well entitled to refpect as a man of learning and fcience. My poor endeavours fhall be no longer awanting to procure for you thofe homages from literary men, which you fo well deferve.
It is the peculiar happinefs of this city to be at once bleft with two furgeons of fuch genius, that other cities in future ages will contend for the ho-
nour of their birth! their names "emblazoned together, fhall form a new Gemini among the zodiacal figns, and be eternal as the fun and the moon, and the ftars! while my poor labours thall be ftrewed with the dufi of all the Capulets *."

The wild uncultured beauties which appear equally in the writings of both, are fo evenly balanced, that in choofing which fhould be the fubject of my eulogiums, I was at firft perplexed, and am now almoft afhamed of the choice I have made; I am fenfible, that, without an apology, I dare not enter into your prefence ! the public would be furprifed, and you would be juftly offended with the lighteft appearance of difrefpect.

I am an author by trade, and the motto of our profeffion is well known, "Qui non laborat non manducat." When exiftence depends thus on our exertions, we are entitled to ufe every fair means of enfuring fuccefs. I know too well the dangers

- This figure I ventured to ufe in No. I. but I think I have greatly improved it now.-I owe this admirable joke, and a great many of the cogical jokes, to my friend Sydrophell.
of trying the flippery path of public opinion, with out precaution. When the Ruffian ventares upon dangerous ice, he yokes ftout horfes to the fledge, but he faftens to it with a long rope one filly horfe, which goes on twenty paces or fo before; and if he plunges into a hole, the Boor cuts the rope, lets him go to the bottom at once, and turns round fome other way. Mr. John Bell* is my enfant perdu : He trots on bravely, and I drive along fearlefs and triumphant !!! Pardon this vanity, Honoured Sir, which your particular civilities have blown into me: You have fo patronized my firft Number, and the public have fo praifed it, that indeed I hardly know myfelf; but this I cannot but know, that my heart ought to overflow with grateful feelings towards you for the countenance you have already given me. The opportunity of revifing your writings, and of difplaying all their rich and varied beauties, and this thrice happy occafion of dedicating to yourfelf; which would in any
* My Firft Number was dedicated to that illuftrious author, and contains a critique of his Volume of Anatomy.
cafe have been a pleafure to me! becomes now 2 mere offering of duty, homage, and gratitude, to my beft patron and friend.

Be contented with what I have done, as I fhall make you happy with what I am going to do ;"The worm I trode upon had nature in it, and it was timely crufhed." But now I return to you with a degree of pleafure which I do not know how to conceal; and I here profefs my contrition for having beftowed one moment upon a worm, a grub, a mere ephemeris! an infect of the hour compared with you! who are the Leviathan, the Bohemoth, the great feaft preordained for the chofen people. Thou art the man of frength, whom we have kept in the dungeon until the rejoicing day, to be brought forth to make fport for the Lords of the Philiftines.

That every one has his faults, is proverbially known; and alfo that it is the duty of a friend to make a man fenfible of them. Benjamin, hold up your head; yours are few and venial; fear not
that I will fearch into them rudely. When I try to open your eyes, you fhall feel only the tickling of an experienced oculift, not the cruelty of a hardened furgeon. And as for your old wounds, I will not open them up again; I cannot even look upon them without pity and compaffion! I fee you have been already under rude hands. I know that man of blood who has ufed you fo cruelly! The felleft of the fell! His furgery is of the old fchool; " Criticus, adfuetus urere, fécare inclementer." He has not diffected you fairly for the benefit of others. He has not probed you quietly to find out your unfound parts. I perceive everywhere over your body, not the incifions of the fcalpel, but the gafhes of the tomohawk; a weapon which he flings with a force and dexterity which nothing but ufe and happy natural difpofitions could give him. He feems to think with the Indians, that when he kills his opponent, he fucceeds to his abilities! and knows, God help us, of no better way of getting at people's brains, than breaking their fculls. But, as your friend, I rejoice in the fteady cool-
nefs with which you have borne his horfe-furgery. His knife has followed his probe fo quickly, that he has left not one hollow place without a gafh. His cruelties are fhocking. He has perforated your Thorax, blown up your Pericardium, turned out your Bowels, cut your Ilium open like a Dog's, thruft the ends of it one within the other like an opera glafs, and fewed it after an ugly falhion. Your Spleen, your Pancreas, your Stomach, and Colon, he has tumbled about! not fparing even your Aorta and Thoracic Duct : He has flapped down your Scalp, trepanned your fcull round and round! and committed upon you all the exceffes and horrors of furgery**. His peers, the butchers, if they could be impannelled upon a jury, could not acquit him of murder.

But while I lament over you, I muft quarrel with you, that is, in a friendly way. When this bloody minded man troubled the College (of which you very naturally confider yourfelf and your copartners as conftituting a majority, or at leaft a quo :

* Vide Bell on Wounds, at which he is reckoned particularly expert.
rum, tres faciunt Collegium); when he began to difturb the College with his johnbellations $\uparrow$, why did you not let him go on quietly? I can affure you he is no more fit than yourfelf to inftitute a literary fociety, and far lefs to create one out of nothing! You fhould have let him "GO ON," and left it to me to fhow how much he is a dunce in fcience, a pretender in anatomy, a puppy in furgery, and a plagiarift in every thing. Was it wifely done to fet your Hall on fire in order to drive out a few vermine? He, and thofe who have joined him, are a fet of felf-fufficient ignorant boys, not equal befides in number to the partners of your own firm. If they have contradicted you, it muft have been from mere conceit, vanity and idlenefs! "They are idle, they are idle, and therefore do
lic is fo apt to be delighted as baiting an author, and the more, as he prefents himfelf voluntarily to the ftake." You have actually prefented yourfelf to the ftake; and if ever thefe barkers fhould gather to the fport! and you feel your round fat haunches gored! remember it was your own bellowing that brought the hounds about you.

Do not defpife thefe yelpers; though their fnarling can never frighten you, their barking may difturb your reft. Nor do not look down upon them with contempt from that pinnacle of glory where you fit magnificently enthroned on ten editions of ten thick octavos. Remember that the pile upon which you fit fo proudly confifts of volumes, volumes confift of chapters; and if but one or two chapters were to be rudely torn out from one volume, the unevennefs of that fingle volume might give a bias to the whole, and make it totter.

Pride is an unmanly paffion; it hurts the truly great; it makes the little contemptible: Pride, like fear, draws a man into danger, " pone fuperbiam." Your comforts are many; you have ac-
quired a great reputation, which the trivial criticifms of a half crown pamphlet will never tarnifh. You are elevated to a line of practice, where, whirled along by the opinion of the day, you ride triumphantly among crowds of defperate and exafperated rivals. You have more folid comforts; you are the Grofphus of the day, and may exclaim with him of old, "Mihi parva rura parca, non mendax dedit et malignum fpernere vulgus ;" leaving it to your namefake to live by authorfhip, and to boaft, with others of the tribe, "Mea virtute me involvo probamque pauperiem, fine dote quaro." Perhaps the gentleman may find, in the end, that fuch wrappings are but cold clothing; but as for you, take the advice of a friend, which I hope is not too late, "Thank God, and fit quiet."

I am not infenfible, Honoured Sir, that I am now entering upon an arduous tafk; and yet I have no doubt but that I fhall be able to review the whole of your volumes with lefs trouble than I have had with this confounded job of Mr. John Bell's fecond volume of Anatomy. It was fo diffi-
cult to pick out exactly fuch paffages as I wifhed! there were fo few words ill fpelled! there was fo little of the book his own, and fo much of it compiled from the beft authors; and although anatomy is the moft fupifying thing on earth, "yet "I found the ftyle fo lively and entertaining, and " the whole book read fo much like a romance "," that I was a good deal at a lofs how to proceed.

I proceeded, however, with all poffible caution and diligence, and hit upon fome tolerable inventions for fulfilling my purpofe. I reviewed his volume of anatomy as if it had been a book of chemiftry; his general hiftories as if they had been particular differtations; and his phifiology I critiçifed according to that moft ingenious theorum in the Encyclopedia queftions of Pantagruel. "Utrum, an elementary fentence, might allege a decennial prefcription againft amphibious animals; and è contra, the other refpectively put in her petition in cafe of feizure and novelty." If I have not fucceeded fo entirely as I had reafon to expect,

[^0]it is from the world having of late fallen back in learning: I fear indeed that liberal ftudies are much neglected, and readers now a-days think to diftinguifh good books from bad by the moft fallacious of all tefts, the evidence of their own untutored fenfés ! without the fmalleft deference to the opinion of philofophers, phifiologifts, philologifts, men of real learning and true fcientific talent.

The ftudy of anatomy I had unfortunately neglected altogether in my younger days. This, in our profeffion, is always a ferious misfortune, and at my time of life it is an irreparable one. I refolved, in thefe delicate circumftances, to act prudently ; and fo I mentioned in the preface that " I fhould review that part of the volume fome other time *." How I could forget what I had fo cunningly contrived, or what vain mifchief-working devil put it in my head to meddle with the anatony, God knows ! but, by St. Patrick, I fet to work with a thing I never intended to do, and blundering on-

[^1]wards, I forgot the difficulties of the bufinefs by ftruggling with them; but after labauring in my vocation with all diligence, I declare to you, upon the word of a Christian! and a true man! I could difcover no fingle tbing wrong, except the fupra fcapular artery being put right *.

Then, the worft of all was this, that as I knew nothing of anatomy but what I had actually learnt from Mr. Bell's book, and he never having mentioned Murray's Tables of the Blood Veffels, from which he has unqueftionably taken his names and arrangements; and there being no good natured friend to mention that book to me; I unfortunately blundered upon the two commoneft books of all, Haller and Sabatier, and accufed Mr. Bell of taking his defcriptions from books which could be of no ufe to him.

Now, fince I am complaining to you of thefe difafters, I will e'en make an end of my narrative. Before this total wreck of reputation as an anatomift, I had laboured through a heavy fea of aus

- Vide No. I.
thors, ancient and modern, not one of which had I ever feen before: I was actually, in order to make fure of fpelling the titles and names correctly, obliged to read over the Bibliotheca Anatomica for the words Haller, Lancifi, Bartholine, Senac, Glyffon, Bidloo, Morgagni, Valfalva, Vieuffens, which the author always fpelt Viuffens, and Erifirtratus, which the author fometimes fpells Eriftratus*; fo that, to be plain with you, I was tired of a tafk for which I was fo little prepared; and the laffitude which fell upon me, in confequence of repeated difappointments and perpetual chagrin! is the real caufe of the whole pamphlet wanting that wit and fpirit which I could fo eafily have given it. But in my prefent fubject I fhall feel none of thefe diftrefles. "Difficile eft fatirum non fcribere." I fhall have no lumbering folios, nor little filthy illfhaped quartos to tumble over. You profane not the vaults of any of the Capulets. You have pillaged no libraries, but have prudently confined yourfelf to the three fyftems which immediately preceded your

[^2]own. You have ftolen not a leaf here and there; you have folen bodily! your venereal difeafe from Aftruck, your furgery from Heifter, your fibs from Garnegeot; but your manner is all your own ! You are, indeed, fo perfect in yourfelf, that it is not without regret I ever fee you copying from others: You have no need to fteal, no apology for ftealing : befides, Sir, petty thefts are always unbecoming, and yours are really of an odious complexion. John Bell now, feals like a proud thief, from rich men only, as Morgagni, Sabatier, Valfalva. Let me tell you, Sir, there is an honefty in ftealing; and if a man muft thieve! as moft of us moderns need to do, he fhould aim at the character of a refpectable thief.

This little work, Sir, will have its merit with literary men. To make the learned of other profeffions acquainted with the moft extraordinary writers in ours, is to make a new alliance among the fciences; and tedious as the tafk may be, I regard it as a public duty; and I will boldly affirm, in the true Tipperary accent of the Author of the

Purfuits of Literature, that " if I had any private end or malignity in any part of my work, I would bave burned it with indignation (which I take to be a damnable kind of burning) before it had appeared." My Numbers are increafing in fize and reputation; and I feel that my name becomes more important, and is in a manner called for by you and by the Public; and fain would I indulge myfelf in the pleafure of difclofing it, for I feel all the little venities of an author fluttering about my precordia. If I conceal my name when I am fo ftrongly tempted, it is for much the fame reafon that the Chinefe, when they fell the bird of Paradife, cut off its feet:-Even a bird of Paradife would be little prized, if it were known to have hopped about like other birds.

A pamphleteer without wit, is like a w-e without beauty; wherefore I have thought fit to rouge over my natural palenefs and poverty with quotations from others; but you will have occafion to obferve, that I never quote with fuch effect as when I quote from myfelf. Pardon my vanity once more;
for it is through your liberal approbation that I venture to exprefs that opinion, which it is but too natural for every author to entertain : yet furely my firt Number is no ordinary compofition! Allow me, honoured Sir, under this privilege of quoting from myfelf, to repeat to you the advice which I gave to your namefake Mr. John- Bell in my firft Number. I fhould have corrected the grammar of it but for want of time; therefore, I pray you let it pafs as it is. The advice is good in the main, though the language may be a little irregular in its modes and tenfes. "One thing " you fhould particularly aim at-I mean-to be" attacked publicly by fome eminent man (Jona" than Bell, for example), becaufe you might then, " with great propriety, cry out perfecution. You " Bould, therefore, attack the character of the moft " refpectable bretbren of the fame profeffion with " yourfelf. The farther your affertions are from the " truth, the more apt will thefe refpectable cha" racters be to attack you; and in tbat cafe you " would gain your point*."
"What do you think, therefore, of affirming, that " remarks have been written by fome of thefe me" dical gentlemen out of pure fpite and ill-nature, in * order to tarnifh thofe laurels which they could " not hinder you from obtaining, and to dimini/b "that glory wibich tbey could not rival."
4) You would only have to reprefent their attack " as proceeding from envy at fuperior abilities and " Akill, and from a defire of concealing from the " world your merit, which, if fufficiently known, "would deftroy themfelves."-" *But, dear Sir, how fhould I pretend to advife you in fuch matters !" " You are too prudent, too good-natured, to retort, and " too proud to fpend even a thought on fuch poor crea" tures $\dagger$ !" Do then be pleafed to turn your whole thoughts towards my neceffitous fituation; it is but to keep ourfelves alive that we do " fuch things as make the profperous men lift up their hands and wonder who could do them." When I confider the natural liberality of your difpofition, and the opportunities you can command, I no longer doubt

[^3]thofe various acts of generofity on four part, which friends have reported to me. You have found out fuch ingenious ways of promoting the circulation of my firf Number, that your condefcenfion in this refpect is to me a ftronger proof of your earneftnefs, than, even your inceffant diligence, which the public has not failed to remark! and which it were very ungrateful in me not to acknowledge. Do not, kind Sir, withdraw your fupport from this fecond Number: Continue to honour me with the fame patronage as at the firft; and I your faithful creature fhall ever pray, \&c.

Being yours until

> Death do us part,

## JONATHAN DAWPLUCKER



It is very natural for my readers to wifh to know who my friend Sydrophell is, whom I mention fo honourably on various occafions. He is my fure friend, a fincere and perfectly honett man, "Dignum eft qui cum in tenebris mices." I cannot produce him in propria perfona, but fhall prefent his portrait, as it is touched off, by one who looked the court and city through, and drew a great many originals to the life.

> To let our reader underttand What's uservil of him before hand; He had been long towards Mathematics, Optics, Philofophy, and Statics; Magic, Horofcopy, Aftrology, And was, old dog, at Phifiology. But as a dog that turns the fpit, Beftirs himfelf, and plies his feet, To climb the wheel, but all in vain, His own weight brings him down again;
And ftill he's in the felf fame place, Where-at his fetting out he was: So-in the circle of the arts, Did he advance his natural parts; Till falling back, ftill for retreat, He fell to juggle, cant and







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## OF BLOOD-LETTING.

He hath bid me to a calf's head; the which if I do not carve moft curioufly, fay, my knife's naught.

Gentle Reader,

THOU art now going to enjoy the beauties of a book which has long been the admiration of profeffional men, and which has fuperfeded all other furgical books. "It is the ftaff of Mofes converted into a ferpent, which has fwallowed up the ferpents of all the magicians who have thrown down the ftaff before him." This is the book which hath raifed the author of it to the firft rank in a learned profeffion, in a city famed for learning! it hath been the only fyftem of furgery for a long courfe of years! To thee have I the pleafure of unfolding its various excellencies. Why fhould I tell thee of the elegance of the language. Of the deep folid reflections; or of the mature and various Jearning of the author !-Gentle reader, read on !!!
" Blood-letting, whether we confider it as to its in" fluence on the fyftem, or with refpect to the nicene/s and " even difficulty in the mode ufually employed for effectA
" ing it, is perhaps one of the moft important operations " in furgery. From being fo frequently put in practice, " and from every pretender to any knowledge in the beal" ing art being able to perform it without any apparent " difficulty, the public have been induced to confider it " as trivial with re/pect to its execution; but every practi-
" tioner of character mult acknowledge, that, in order to " perform this operation properly, the greateft nicety, fleadi" ne/fs, and exactness, are neceffary. All the other ope" rations in furgery I have frequently feen well performed; " but I can with freedom fay, that I have feldom feen " blood-letting with the lancet done very correctly: When " properly performed, it is really a neat operation.; but " when not done with much exactnefs, it is the very ri" verse."
" It is not here meant to enter into the'confideration " of the various caufes which, in different circumftances, " point out the propriety of alf/racting blood from the " fyftem; nor is it intended to enter upon a particular " difcuffion of the different effects produced by general and " topical blood-letting: Thefe confiderations, as being high" ly important, would of themfelves extend to a very great " length; and befides, are of fuch a nature as renders it " impoffible to enter minutely upon their difcuffion in any " $\mathrm{f} . \mathrm{y}$ tem of furgery. All that is here intended, is to de" fcribe, as clearly as poffible, the various modes of per" forming the operation of blood-letting."
" In all inflammatory affections producing a general dif" order of the fyftem, the metbod of taking away blood, " as now eflablifbed by immonorial practice, is, by fuch
" means as discharges the quantity to be taken in a " Joort Space of time, by an opening made with a lancet, " either in an artery or in a vein. The latter of thefe " termed Phlebotomy, and the former Arteriotomy, are " the means employed for what we term general blood-let-
" ting the particular confideration of which we fhall pre" fently attend to."

If the peculiar beauties of this piece of compofition, of this elegant peroration! were in danger of being loft, we fhould not be awanting in our duty; but would it not be an infult on any reader to point out the nicenefs, neatnefs, fleadinefs, exactnefs, perfectnefs, and propriety of the language? thefe, like all the other elegancies of this author, ftrike the eye of the moft indifferent obferver. I have feen by chance a gentleman, not of the medical profeffion, but, notwith/landing, fomewhat of a fcholar, take up one of our author's volumes in a carelefs way. But no fooner has his imagination been ftruck with the frequent repetition of certain magical words, which our author has great faith in, than I have obferved his eye, gliftening with curiofity and expectation, run rapidly along the page, as if with a defire to turn from it, and yet fixed to it as if by the fafcination of a ferpent; and after fome murmurings of applaufe, he has afked in a voice half fuppreffed-labouring under all the anxiety of novelty and admiration, " Are all your medical writers fuch mafters of language and compofition? I have heard of Mr. Benjamin Bell-pray is this his book?" Yes, Sir, it is, and I can affure you that this opening of the book is far from being fortunate for the author; there is not in all the volume one page, nor in all the fyftem one volume, inferior to this! nor one volume, page, para-
graph, line, fentence, nor individual word even, in all the author's works, which has not its peculiar and appropriate beauties; and as you turn over his pages, you will everywhere find his abilities and good fenfe even to excel his tafte! He is none of thofe who feduce you by fine words and fmooth periods to read nonfenfe. In the paffage above quoted, you cannot but admire the fubtilty of his diftinctions between the actual operation of Phlebotomy, and its influence over the fyftem by the abftraction of blood ; the depth and foundnefs of his judgment, in difcovering the importance of a fubject hitherto fo much neglected ; the extent of his genius in giving a due degree of rank to this, in the fcale of his furgical operations; and you will no doubt be touched with the winning modefty with which he mentions, "that he has never feen this important operation properly performed, nor with fufficient nicety, fteadinefs, and exactnefs, except by himfelf!" How much then, mult he be fuperior in other operations!?

Our author glides on from page to page, from paragraph to paragraph, in the fame eafy flowing vein; he fpends a few of the following pages in giving the young furgeon fome very judicious rules for placing his patient ! for holding the arm fteady while he is bleeding him ! and alfo for obtaining an ingredient, very neceffary or ufeful at leaft in every chirurgical operation, viz. for obtaining ! day light in perfection !
" As the fituation (i. e. the pofture) of a patient during " the operation of blood-letting, has a confiderable influ" ence on the effects produced by the evacuation upon the " fyftem, this circumftance therefore merits our particu" lar attention.
" The patient being properly feated, the next ftep in " every operation of this kind mult therefore be, by means " of a proper bandage fo to comprefs the vein intended " to be opened, as to prevent the blood from returning " to the heart ; and for the fame reafon, an equal degree of " preffure, it is obvious, ought to be applied to all the " other veins of the part; for, if this circumftance foould " not be attended to, (Quer. Would it not rather be fome" what difficult not to attend to it?) the communication " preferved by the collateral corre/ponding branches, would " render the preffure upon any one particular vein of very " little importance. But, independent of its producing a " more free difcharge of blood than could be otberwife ob" tained, this preffure upon the veins, by inducing an ac" cumulation of their contents, tends to bring them more " evidently into view, and confequently renders it eafier for " the operator to effect a proper opening than he would " otberwife find it."
"While we thus, however, attend particularly to the " pofture of the body at large, the particular pofition of " the limb or part to be operated upon muft not be neglect" ed. In every operation it is a matter of much import" ance to have the patient feated in a proper light, but in " none is it more material than in blood-letting. The " beft general rule that can be given upon this point is, " that the patient ought to be fo placed, as that the prin" cipal light of the apartment fhall fall directly upon the " part to be operated upon, fo that the vein to be opened " may be made as apparent as poffible. When clear day-
" light can be obtained, it ought to be preferred; but " when not to be bad in perfection, one or more candles " fhould be bad recourfe to."

Swift, in his College of Projectors, fuggefts that daylight in perfection, which he calls fun-beams; (and I fuppofe the two authors mean pretty nearly the fame thing), may be obtained from cucumbers by diftillation.
" But, whatever may be the pofition of the part to be " operated upon, and whether the patient is to be placed on "a bed or on a chair, the furgeon ought always to be " Jeated. The operation may, no doubt, be done while " the furgeon is ftanding; and it is moft frequently indeed " performed in tbis manner: But it can never be done ei" ther with fuch fteadinefs or neatnefs, as when the opera"tor is firmly feated on a chair."

Next comes the anatomy of the veins of the arm. Let Dr. Monro look to it. He was Mr. Bell's teacher.
" In forming the choice of a vein from whence blood is " to be taken, the general rules we have already laid down " upon this point, muft be here particularly attended to. " That vein which appears moft confpicuous, at the fame " time that it rolls leaft under the fkin , fhould in general be " fixed upon: but when an artery is found to lie immedi" ately below, AND quite contiguous to fuch a vein, the ope" rator, if he is not perfectly fatisfied with his own ftea"dinefs, ought rather to take fome other-(artery, does " he mean?) In general, however, the artery lies fo " low in this place, that the median bafilic vein, under " which it commonly runs, may be opened with perfect " fafety; and as this vein in general appiears more con/pi-
" cuous than any or the others, probably from the con" tinued pulfation of the artery below obflructing in fome " meafure the paflage of its contents, it is in this refpect " therefore more properly calculated for this operation " than any of the otbers. Otber circumftances occur too, " which render the median bafilic preferable to the ce" phalic or median cephalic veins for the operation of " blood-letting. The former, viz. the median bafilic, is " lefs deeply covered with cellular fubftance, and by ly" ing towards the inner part of the arm it is more thinly co" vered with the tendinous expanfion of the biceps mufcle, than " either of the others. From thefe circumfances the ope" ration is always attended with lefs pain when done in this " vein, than in any of the otbers; and that confideration " alone ought to have a good deal of influence in deter" mining the choice of an operator."

It is very commonly obferved, that anatomy is perplexing to beginners; but you, Mr. Bell, are an anatomift fo deeply verfed in parts quite unknown to Dr. Monro (whom you have libelled with a dedication, publicly accufing him of being your teacher in anatomy), that you are able to puzzle, not mere ftudents, but thofe even who are anatomifts by profeffion. You might difpute with Sheldon upon the anatomy of the knee joint, or with Monro upon the anatomy of the burfe, or with your namefake Jonathan on the anatomy of the fupra fcapular artery.

Where did you get this anatomy of the veins of the arm? Where did you find veins above, and veins below the fafcia? veins much above the fafcia? and veins more above the fafcia? Sir, you muft tell! Befides, there is a theory here
concerning the great fize of the bafilic vein which the whole world will envy you: You muft tell from whom you have ftolen it. "The morfel which thou haft eaten fhalt thou vomit up again, and lofe thy fweet words."

We know that you furgeons of Edinburgh muft be eminent anatomifts. The reafon is to be found in your Seal of Caufe, your Charter, which was given you by James IV. of Scotland, himfelf a cunning leech; of whom Pittfcottie fays " there was no furgeon in the realm that ufed that craft but would take his advice." It was by James that this -celebrated college (this college! literatura, et experientia, proba inftitutione, et multis peregrinationibus exteris comparata nullis ufpiam terrarum in ea arte cedens etiam quam celleberrimis *!) was endowed; and in this Seal of Caufe the King an Councile order that " ye may have ance in the year a condemned man, after he be dead, to make anatomia of, quhairthrow ye may have experience ilk ane to inftruck others, and ye fhall doe fuffrage for the faule $\dagger$."

It was three hundred years ago that the Royal College of Surgeons became thus careful about anatomy: Why then fhould we wonder to fee Mr. Benjamin Bell teaching his difcoveries in that fcience to all Europe? for this dead body was given by King James in order "that ye knaw anatomia, nature and complexions of man's body, and likewife that ye knaw all the veins of the famen, that ye may make phlebotomia in due tyme."

Mr. Bell is guilty, in the next paragraph, of a moft unhandfome joke againft the Germans, efpecially unbecoming

[^4][^5]in a grave man (for Mr. Bell is a grave man), and fhocking in one who has copied all his books from worfe than a German, from a Dutchman ! from honeft Laurence Heifter !-Meaning to explain to his reader, that the Germans prefer an inftrument fomewhat like a horfe-fleam to the lancet Mr. Bell fignifies to us, with a knavifh orthographical quaintnefs, which we thought him incapable of, that "the phlegm in many parts of Germany has acquired a great reputation."

I was at firft much at a lofs how to conduct myfelf ; I did not feel myfelf called upon, even under the facred character of a true and impartial critic, to accufe my favourite author of a lese-reputation againft his old mafter; but I found the fame expreffion too often repeated to admit a doubt in what light I was to confider it *. Indeed I have long furpected that Phlegm did fome

[^6]times acquire reputation; and I am well affured that Mr . Bell himfelf has long indulged a belief in this doctrine. If any proof of this were needed, I fhould refer my reader firft to the frontifpiece of Mr. Bell's Syftem, which is an ideal drawing by a very celebrated artift of this city, Mr, Raeburn. -It is a figlrative representation of phlegm fitting acquiring reputation *! After he has perufed that page I would refer him next to the preface, where Mr. Bell fays, " Anxious to avoid controverfial writing, in which a full occupation of my time in what I judge to be more useful purfuits does not permit me to engage, and to which my inclination is altogether ADVERSE, notbing fhall tempt me to give way to it :" And the courteous reader having ftudied that elegant text fo far as to underftand its meaning, I would tranfcribe another, but, alas ! with grief and
" Independent of this too, by the ufe of the lancet, we have it much more in our power to command an orifice of a determined fize than when the phlegm is ufed: So that, without hefitation, we may venture to pronounce the phlegm to be an inftrument in no degree neceflary; but for fuch as incline to ufe it, the moft convenient form of one is reprefented in Plate III. fig. 2.
" The manner of ufing the rhlegm is as follows. The bandage for fccuring the turgefcency of the veins being applied," \&c.-This our author explains in favour of the young furgeon, left, when he comes to be examined at Surgeons Hall, he fhould be as much puzzled as Roderic Random was with the Examiner's retort, "What, Sir! before you tie up the arm?"

* I can tell you, Mr. Benjamin, neither you nor your namefake Jonathan, fland high upon Lavater's books, who fays, in his Effay upon the temperaments, "You will rifk nothing if you affirm of a man always ready to boil over, that he will never be fufceptible of the real enthufiafm of genius.-Abfolute phlegm, I admit! is not more favourable to it!"
vexation: "This remark," fays this phlegmatic, " I am " induced to fuggeft, from having been informed that " fome have written in fuch a manner on different parts " of my publications, as if they wifhed, and expect" ed, that I fhould reply to them.——Books of THis DE" scription, however !!! I fhall never read!!!" Will fo proud, fo great, fo dignified, fo magnanimous an author as this, condefcend to look down upon a poor pamphleteer? Alas, my poor pamphlet will never reach the hand of this the greateft writer of the age : he may indeed be "informed of it;" but he whom the rude garhes of Jonathan the anatomical furgeon have not awakened from his fettled phlegm, will never heed the nibbling bill of Jonathan Dawplucker, twitching a few ftraggling plumes from his glorious goofe wing: Neverthelefs will I adventure to pluck a few, and fet them in my cap, not as trophies, but as favours, denoting my connection with this great man.-Yet furely there is in all this fomething which philofophy cannot explain. Is it not furprifing! great as this author is, that he fhould be informed from time to time of fuch books as Dr . Beddoes', Mr. Earle's, Dr. Sheldon's, Mr. John Bell's, Don Antonio de Gimbernats !!! \&c. without having the flighteft defire to fee them? How few people are there fo ftrangely blown up with pride and phlegm as not to feel a public attack in fome degree? How very few who would not like to know whether they were called blockhead only, or both rogue and blockhead?-and yet, as Sir Fretful Plagiary very feelingly obferves, "There is always fome damn-ed-good-natured_friend! to tell one about thefe things."

The dangers of ufing a broad-fhouldered lancet are fuch, as we are well affured no furgeon (Mr. Benjamin Bell
excepted), has the flighteft conception of. The roundfhouldered lancet abfolutely makes a wound in the vein three times as large as that in the fkin; but as it is probable that many furgeons believe the fkin to be too thin and too clofe upon the vein to allow of any perceptible difference (much lefs the difference of half an inch) betwixt the fize of the two orifices (if there be indeed two orifices), we fhall here ftate the fact in the words of one of the moft celebrated furgeons in Europe.
" The capital objection to this form of the round-finoul" dered lancet, is, that the broadnefs of its fhoulders pro" duces always a wound in the external teguments of per" haps tbree times the fize of the opening made in the vein; " a circumftance which adds no advantage whatever to " the operation: On the contrary, ir produces much un" neceflary pain in the firft inftance; it renders it fre" quently a very difficult matter to command a foppage of " the blood; and the wounds produced by it are com" monly fo extenfive as to render them very liable to ter" minate in partial fuppurations, an occurrence which al" ways proves painful and difagreeable to the patient."

After a few pages employed in explaining the various lancets and phlegms with which this important operation is to be performed, Mr. Bell proceeds to give the following nice, neat, fbort, exact, correct, milliner-like directions for holding the lancet.
" The lancet being bent to fomewhat more than right " angles, the operator now takes it between the finger and " thumb of bis rigbt band; and, leaving at leaft one half of " the blade uncovered, he refts his hand on the middle fin-
" ger, ring finger, and little finger, all placed as conveniently " as pofible in the neigbbourbood of the vein from whence
" the blood is to be taken, and having pulhed the point of " the inftrument freely through the Jkin and teguments into " the vein, he now carries it forward in an oblique direction, " till the orifice is of the fize he inclines to have it; tak" ing care, during the time of pufhing on the lancet, that " its point be kept in as ftraight a direction as poffible, for " fear of dipping into the parts below."
"Tbe inflrument is now to be witbdrawn, and the furgeon " removing the thumb of his'left band, is to allow the vein " to empty itfelf freely into the different cups previouly pro" vided for the purpofe *."

For the good of furgery, and the gratification of $\mathrm{my}{ }^{*}$ reader; for Mr. Bell's honour and my own exculpation, I have continued his valuable text in the foot-note be-

[^7]low ! without which, to ferve as a running bafs ! my fong would make but imperfect mufic. In thofe parts of the text my reader will find Mr. Benjamin Bell explaining " the " caufe of the origin! of pricks of the nerves and tendons !" talking moft learnedly about " transfixing the veins,"wounding the nerves," and "feeling for thofe dangerous nerves with the fingers;" explaining, by winks, and nods, and inuendos, in his own quiet way, "who is, and who is not poffeffed of a fufficient degree of fteadinefs to perform this operation;" explaining alfo, in a peculiarly impreflive manner, " the acute pain,"-the " burning heat,"-" the fenfation running up along the humerus;" the diftrefs-the gangrenes-the convulfions-the locked - jaw-and the fatal confequences which follow bleeding. He delivers a deeply interefting hiftory of Mr. Hunter's doctrine of an inflamed vein: And he concludes this very cu-
"With refpect to the fize of orifice in cafes of blood-letting, this circum" ftance muft at all times be determined by the nature of the diforder for " which the evacuation is preferibed."-" But in an operation of im" portance, every particular requires much attention. Now, one material " ufe of the thumb placed below the part where the lancet was direded to " enter," \&c.

Let us clofe this fection with a feecimen of elegant and lucid defcription, and very impreffive reafoning. It is a defcription of the confequences of this tendon, nerve, or any thing (we don't know what), which is in the arm, and is often coming in the way of the operator's lancet.

## Of Wounds or Pricks in the Nerves or Tendons.

" Although the nerves, from the fmallnefs of their fize, cannot pre" vioully be diflingui/bed by the fingers; yet, if fufficient attention be " given to the direction of the point of the lancet, fo as to avoid with cer"tainty carrying the inftrument through the back part of the vein, the
rious difquifition on wounded nerves, with a declaration of fupremacy as felf-important, intolerant, and tyrannical as a pope's bull ; and all for nothing!! For Mr. Bell is fo far from having any opinion concerning the caufe of the dangerous fymptoms which fometimes follow from bleeding in the arm, that he fays, " There is great reafon, however, to think, that in different inflances the same train of fymptoms bave been induced by different caufes; that in one inflance a wounded nerve, and in another pricks of the tendons, have given rife to them." And then, in compliment to his own ingenuity, and to his own phlegm, he adds, " Being decidedey of this opinion myself! !! I think every person must be so. But as the fame method of treatment proves equally applicable, whether the difeafe has proceeded from a wound of a nerve, or of a ten-
" fame means which tend to fecure the arteries and tendons, will with al" moft equal furenefs prove a fafiguard to the nerves : For, if the opera" tor enters his lancet, as he ought always to do, on the fuperior part of "the vein, and if he does not cut the vein entirely acrofs, by pufhing the " lancet through to the oppofite fide of it, be can never run any rifk of " wounding the contiguous nerves; for the conftant courfe of thefe nerves " lying fo near to the different veins, is, either immediately below the " veins, or at leaft fo far down upon their fides as to be out of all rikk of " being wounded, if the lancet is made to enter where it ought to do, and " it muft always be the furgeon's fault if the inftrument is pufhed out at "the oppofite fide of . a vein. I may venture to afert, that no inconvenience " of this kind ever happens, from the wound made by a lancet in entering " the anterior part of a vein: It is always on the oppofite fide of the vein " that any mifchief of this kind is produced, by the lancet, as we have al" ready obferved, being pufhed entirely through; a fituation it ought never "to be in, AND which every furgeon ought to have fteadinefs enough to " prevent.
don, we po not think it neceffary to enter here into a more minute difcuffion of the queftion !!!"

Here our author holes himfelf in his natural element, and we fhall fee no more of him! Having led us through this vaft foreft of tall and ftately words (which, by the by, are all fo fimilar to one another, that, like wild Indians, we are obliged to notch every ftem and ftump with the hatchet as as we go along, in order to find the way back again), he carries us up to the mouth of his hole, and there he earths himfelf, and leaves us to ftare about us.

But to leave off figures, let us be as careful as we ought to be not to lofe the benefit of the many important leffons which thefe pages contain. We are taught,-firt,to try to diftinguifh the nerves with the fingers ! the fmall nerves which go over the cutaneous veins! which are indeed fo fmall that I fhall give Dr. Monro, Mr. Benjamin Bell, Mr. John Bell, or any diffector, furgeon, or anatomift

[^8]among them all! fix hours to make thefe dangerous nerves vifible, even by diffection ! deliberate diffection, in a dead body!

Secondly, We are taught to introduce our lancet on the fuperior part of the vein, left we fhould be fo ftupid as to ftrike the vein through the elbow, and from behind.

Thirdly, We are taught, that thefe cutaneous nerves, (which are fo named by anatomifts becaufe of their belonging to the ikin immediately covering the veins)," lie either entirely behind the veins, or far down upon tbeir fides ! as if their fides were as fteep as the Andes or Teneriff! and there were a day's travel from the region of the cutaneous nerves, to the fummit. This is the anatomical defeription of nerves which wander irregularly acrofs the face of all the veins, and which are wounded before the vein is touched ; for fuch branches of thefe nerves as are hurt in bleeding, lie betwixt the veins and the ikin.

Fourthly, We are taught, that a furgeon never can hurt
" Aate as poffible, the pain at firlt complained of will gradually abate, and " at laft go off entirely without-any bad confequence whatever.
"At other times, bowever, the pain which occurs inftantaneoully or " the introduction of the lancet, intead of abating, begins foon to in" creafe; a fullnefs, or fmall degree of fwelling, takes place in the parts " contiguous to the wound; the lips of the fore become fomewhat hard and " inflamed; and in the courfe of twenty-four hours or fo from the opera " tion, a thin watery ferum begins to be difcharged at the orifice.
" If, by the means employed, relief is not foon obtained, thefe fymp-
" toms generally continue in nearly the fame ftate, for two, or perhaps
" three days longer. At this time the violent pain which at firft took place
" becomes ftill more diftreffing, but inftead of being /harp and acute as bee
" fore, it is now attended with the fenfation of a burning beaf, which ftill
the arm, " if he does not entirely cut the vein acrofs, by purhing the lancet through to the oppofite fide of it, he can never run any rifk of wounding the contiguous nerve; a fituation it ought never to be in." Let it be remembered, then, henceforward, that never, in the practice of Mr. Bell, fhall the arm or ankle of man, woman, or child inflame ! that would imply, that Mr. Bell had very clumfily transfixed the vein! a thing impoffible in the practice of fo nice an operator. As for other furgeons, to whom accidents of this kind are occurrnng daily, they are without apology, or, at leaft, they muft find out fome other text, for their vindication than that of Mr. Benjamin Bell.

We are next informed, that when pain begins to be attended with a fenfation of burning heat, it ceafes to be acute! and that heat! burning heat at leaft ! is a fource of diftrefs: and that, when this burning heat proceeds from bleeding in the arm, it runs along the arm ! ! ! and that,

[^9]when it happens from bleeding in the leg, it runs up the leg ! ! ! but of this, however, we are not very fure. We are next informed, that there is great reafon to believe, that in different inftances the fame train of fymptoms have been induced by different caufes; and that, in one inftance, the wound of a Nerve (which is the chief inftrument of fenfation), and, in others, pricks of Tendons (which are declared to be parts totally void of fenfibility), produce exactly the fame fymptoms!!!

We are told next, in very modeft language (but, however, without entering into controverly !) that the author is decidedly of this opinion. "He thinks fo!!! therefore every other perfon muft furely be fatisfied to think fo, which renders it unneceffary to enter into difquifitions."

We are next told, though the fymptoms are produced by the wounds of parts fo oppofite in their nature, that the fame method of treatment muft prove equally applicable to
" ed fatal, and the dreadful train of fymptoms we have already enumerat. " ed uniformly occurred in all of them.
"Different opinions have prevailed refpecting the caufe of thefe fymp" toms: By fome they have been imputed to wounds of the tendons; and " by others the tendons are fuppofed to be fo entirely deftitute of fenfib;" lity, as to be quite incapable of producing fo much dijfrefs; fo that "wounds of the nerves they confider in all fuch occafions as the true caufe " of the various fymptoms we bave mentioned.
" One or other of thefe ideaj, continued to be the only fource for ex" plaining the various phenomena FOUND to occur in this malady, " till a diferent opinion was at laft fuggefted by the ingenious Mr. John
" Hunter of London. Mr. Hunter fuppofes, that all the dreadful fymp" toms found now and then to be induced by the operation of bloed-letting,
both, whether the difeafe has originated from the wound of a nerve, or the prick of a tendon!!!

This manner of writing is fo convincing, and the language has fo many feductions, that we cannot wonder at the book being univerfally admired. Through the firft hundred pages our author is employed in explaining the importance of this great operation ! the danger of it ! the phlegms, lancets, ligatures, light and candleg, with which it is performed! the difficulty of performing it ! the spasms, convulsions, gangrenes, and what not, which follow ! !! But this mock tragedy terminates in a fene truly bloody and tragical, which begins with the following moft mufical alteration: " It often happens, however!!!"
" It often bappens, bowever, in this very alarming difor" der, either from neglecting the matter altogether on the " accident firft happening, as is too frequently the cafe, of " from an improper fubfequent treatment by warm emollient " applications, that opiates and all the other remedies enu-
" may be more readily accounted for, from an inflamed fate of the inter" nal furface of the vein, than from any other caufe; yet I think we may " very fairly conclude, that it could not probably, in any one inflance, "be able to account with satisfaction for their firft production."
"There is great reafon, however, to think, that in different inftances " the fame train of fymptoms have been induced by diferent caufes; that " in one inflance a wounded nerve, and in other pricks of the tendons, have " given rife to them. Being decidedly of this opinion myfelf, I think every "perfon muf $l_{e}$ fo, who has paid much attention to the fubject!!! but as the " fame method of treatment proves equally applicable, whether the difeafe " has originated from the wcund of a nerve or of a tendon, we do not " think it neceflary to enter here into a more minute difcuffion of the quef. " tion."
" merated are afterwards bad recourfe to, without any ad-
" vantage uubatever: The fever, pain, and fwelling of the ${ }^{46}$ parts continuing, convulfive affections of the muscles " at laft occur; all tending to indicate the moft imminent " danger!!!
" In this fituation of matters, if we have not immedi" ate recourfe to fome effectual means, the patient will " foon fall a viffim to the diforder; and the only remedy " from which, in thefe circumftances, much real advantage " is to be expected, is a free and extenfive divifion of the " parts, in which the orifice producing all the mifchief was " at firft made. We know well, from the repeated expe" rience of ages!!! that much more pain and diftrefs of " every kind is commonly produced by the partial divifion " either of a nerve or of a tendon, than from any of thefe " parts being at once cut entirely acrofs. Now, the inten" tion of the operation, here recommended, is to produce a " complete divifion of the nerve or tendon we fuppofe to " have been wounded by the point of the lancet, and which " we confider as the fole caufe of all the fubfequent difitrefs. " As all the contiguous parts are now fuppofed to be " much fwelled, and in a ftate of high inflammation, it is
" impolible to get proper accefs either to the nerve or ten" don, but by means of a large and extenfive incifion; and " as this cannot be effected without fome rifk, of opening " at leaft fome large brancbes of arteries, the firft ftep to be " taken in this operation is, to fecure the parts, againft the " effects of fuch an occurrence, by the application of the " tourniquet on the fuperior part of the member ! ! !
"This precaution is neceffary, not only for guarding
" againft the lofs of blood which would enfue from a divi" fion of any of the large arteries, but for preventing inter" ruption during the operation, which would otherwife oc" cur from a conitant difcharge of blood from the finaller " veffels. The tourniquet indeed is more particularly re" quifte with " a view to the prevention of this laft incon" venience, than for any other reafon; for although it is " proper by means of it to guard againtt the effects to be " expected from a divifion of any of the large arteries, yet " with proper caution fuch an occurrence may in moft " cafes be very eafily avoided.
"The tourniquet, then, being properly applied, a tran/" verfe incifion fhould be made with a common fcalpel *, " upon the parts chiefly affected, and it ought to run in " a direction exactly across the original orifice in " the vein.

- " In every furgical operation, rashniss is undoubtedly " improprs, and is often producive of difagreeable confe" quences !!! but unneceffary caution, which almoft con" ftantly proceeds from the operator being inaccurate " and confiyfed in bis ideas of the anatomy of the parts, gene" rally produces fuch a degree of timidity, as ultimately " proves more hurtful to the patient, than even an un"ufual degree of forwardnefs; for in every operation " where an incifion is neceffary, if the firft cut is not made " fudly fufficient for the intended purpofe, all the fubfequent " Ateps of it are commonly either much retarded, or per" haps rendered entirely ineffectual.
" The external teguments being thus freely divided,
* For the mott proper form of a fcalpel, fee Plate IV.
" the operator is now to proceed in a gradual manner, " making one llight incifion after another, taking care, if " poffible, to avoid wounding either the larger arteries or " veins; and he is to go on in this way, to endeavour to " detect the wounded nerve; or if there is no poffibility of " doing fo, even by great caution and nicety in wiping " aveay with a spunee every particle of blood as he goes " along ! ! ! he muft fill continue to proceed in this flow gra" dual manner, till he has divided every part between the " SKIN AND PERIosfiUm ! the tendons, larger arteries, and " veins, excepted!!!!!
" At this time the tourniquet fhould be loofened; and,
" in all probability, the patient will be found to exprefs mucb
" Sativfaction at what bas been done!!! For, if the part is thus
" divided, which originally had been pricked by the lan-
" cet, and from whence all the fubfequent diftrefs proceeded,
" an immediate relief will note be obtained! but on the
" contrary, if the pain ftill continues violent, we are tbere-
" by rendered almoft certain of the mifchief lying altogether
" in one or otber of the tendons ! !!
" An accurate examination, therefore, muft now be " made, by clearing the parts effectually with a spunge; " and that tendon lying moft contiguous to the vein in " which the orifice was made, will in all probability be
" found either wounded, or in an evident state of
" inflammation!!! but at all events, whether any fuch
" appearances are detected or not, no hefitation whatever
" fhould occur as to the propriety of dividing that tendon
" which lies mofl contiguous to the vein!!! or if two or even
" three tendinous extremities fhould happen to lie in the
"way, and to be all therefore equally liable to fuppicion, they " ought all undoubtedly to be cut entirely acrofs; and " this being properly effected, it will feldom occur that much * relief is not immediately derived from it!!! And at any " rate, this being done, every attempt will bave been made " from which we could expect any benefit to arife!!!
" The remedy here recommended, if every circumflance " is not duly attended to, may probably be confidered as " fevere; for such an incision carried to such a depth, " muft no doubt be attended with much pain; and the " divifion of one or more tendons !!!' runs a confiderable rifk " of producing at leaft a partial lamenefs, and that too pro" bably for life, of the whole member ! ! !
" But, if we confider for a moment the importance " of the object in view, every confideration of this kind " muft immediately vanijb. It is not a trifling advan* tage we are in purfuit of, nor can fuch a painful ope" ration be ever with propriety bad recourfe to but from " real neceffity. In the prefent inftance, bowever, it is " clear that the patient's life is in all probability to " depend on the event of this operation; fo that the moft " timid operator, if he is at all capable of reflection!!! muft " admit the propriety of putting it in practice; and from the " event of almoft every cafe of this nature, that has once " advanced to the length for which we have recommended " the operation in queftion, it may with great certainty be " pronounced, that every patient in fuch circumftances is " in the outmost hazard of his life! fo that in fuch a def" perate fituation, no remedy that affords any tolerable " chance of a recovery, however painfil it may be, can " with PRopriety be condemned!!!
" There is not therefore a point in furgery that I am more " fatisfied of, than the propriety of fuch an operation in all " fuch defperate cafes as the one we have been treating of !!!! " but to fucb as have not bappened to meet witb occurrences " of this nature, the remedy propofed will not only appear " to be too violent for the dijeafe, but they will alfo be in" duced to confider the length of difcuffion here gone into " to be much more prolix than is neceffary: A fingle in" Alance, however, of the dreadful fymptoms now and then " induced by accidents of this kind, will be fully fuficient " to convince any man, that the fubject now under confi" deration is perhaps one of the mo/t important in the depart" ment of furgery ! ! !"
Perhaps there never was a writer fo remarkable, as this Mr. Bell, for fluttering round and round a fubject. He flutters a little while, feems to fly for a moment, grows giddy, falls down, flutters again ! and falls again! and again flutters, till he is quite exhaufted. "He now to fenfe, now nonfenfe leaning, means not, but blunders round a meaning."
There is no ftronger mark of ignorance in the medical profeffion, and want of talents, than an affectation of magnifying all the difficulties of it. Hearken to an anatomift ! and he would perfuade you there were a convulfion in every nerve ! to a furgeon, and he would perfuade you that no man who had got a cut on the head could be faved without the trepan! and to hear a certain accoucheur of my acquaintance talk of accoucheurfhip! (which he is by no means unwilling to do), you would be perfuaded that a woman could not be delivered without hooks and forceps,
and that all the people you do fee in the ftreets came into the world with their feet foremoft. But thefe are modeft johnbellations * compared with the lunacy that is fo apparent all throughout this long chapter, where bleeding, which is performed by every boy and old midwife, is reprefented as the moft formidable operation in furgery, and its confequences as more to be feared than the bite of the cobra di capella! where it is even affirmed that there is no cure, no poffibility of being faved from this gnafhing of teeth, and fpafms, and gangrene! but by an operation worfe than amputation, fince it has all the pain of amputation, and fince the arm " continues ever after to hang ufelefs by the fide."

This operation, which the author declares to be in his opinion the moft neceflary in all furgery, is, we will venture to fay, the moft unprecedented and extraordinary in all furgery; and from the fcrewing of the tourniquet to the final ftroke, by which the amputation is completed, is a mere romance ! ! We fake our critical reputation upon the proving of this, point for point.

Firft a tourniquet is applied, which no man would think of ufing who meant to cut the tendons and nerves only, and who of courfe was defirous of feeling the pulfations of the artery, fo as to avoid it. The young furgeon-for, God forgive us, it is to him all this is addreffed-is directed to make an incifion fairly acrofs the bend of the arm; and yet he is defired " to avoid wounding either the great arteries or veins," as if it were poffible to cut acrofs the arm, without cutting acrofs all the great fuperficial veins

[^10]and the artery alfo, which is almoft as fuperficial as the veins. How could an artery which is fo often pricked with the lancet efcape fuch an incifion?

Thirdly, He is directed, in the midft of a bloody operation, to endeavour to detect the wounded nerve; a nerve which is itfelf too fmall to be eafily feen even in diffection. The looking for the prick of the lancet in one of the cutaneous nerves, is completely ludicrous, and favours much of " inaccurate and confufed ideas of the anatomy of the " parts producing timidity which ultimately proves hurt" ful," \&c.
Fourthly, We are informed, that " if an incifion (none of your nice, neat, careful, curious, correct, perfect incifions, but an incifion going to the bone!) has not given the patient perfect relief, and if the pain continue, we are rendered certain, or almoft certain, of the mifchief lying altogether in one or other of the tendons." "An accurate examination muft therefore now be made, and that tendon lying most contiguous to the vein will in all probability be found either wounded, or in an evident state of inflammation ! !!" This is a rule which every furgeon will fubfcribe to. If any furgeon ever find a tendon in an evident flate of inflammation, let him cut it ; for as the inflammation of a tendon is a thing quite unheard of hitherto, fuch inflamed tendon fhould be inftantly cut acrofs, nor allowed to remain one moment a reproach to operative chirurgery; and fhould the young furgeon, by the help of a micrifcope, detect a prick in the tendon! let him cut up the tendon! We fubfcribe to this rule alfo; becaufe, if he do this only when he fees a wound in the tendon, he will feldom do harm.

Fifthly, We are told, " That at all events, no hefitation fhould occur as to the propriety of dividing the tendon which lies moft contiguous to the vein; or if rwo or even three tendinous extremities fhould lie in the way, fo as to be all, therefore, equally liable to suspicion, they ought all undoubtedly to be cut entirely acrofs."

This rule alfo we fubfcribe to. Cut every tbing; that is the fure way to relieve your patient! Cut every thing acrofs! that is the beft way of cutting. Cut the tendon that is neareft the vein, if you know it ! (for hitherto anatomifts have never mentioned more than one tendon in the bend of the arm-or indeed within fix inches of the bend of the arm). But moft efpecially, as Mr. Bell obferves, you are entitled to cut two, or even three tendons, if they fhould occur!! chiefly becaufe! they have no bufinefs there.

Let us, in conclufion, fum up the cuts, or, as Mr. Benja$\min$ calls them, the steps of this incifion. You firt apply a tourniquet, that the patient may not die when the artery is cut. You go on flowly, dividing every part betwixt the fkin and the periofteum, the tendons, larger arteries, and nerves excepted. Now, I defy all the critics in the world to produce me a piece of more finifhed nonfenfe than this is. There is nothing betwixt the fkin and the bone but tendons and blood veffels; one tendon, the tendon of the biceps ; one mufcle, the brachialis; one artery, the main artery of the arm, and all the veins, both external and internal: If you cut down to the periofteum, or, in other terms, to the bone, you cut them all: If you cut all that lies betwixt the fkin and the periofteum, it is impof-
fible that the arm fhould live-you actually perform amputation! The conclufion of all this nonfenfe is the only fuitable one, "That in all probability the patient " will be found to exprefs much satisfaction at what " is done! !!"
There is one virtue in you, Mr. Benjamin Bell, which I never fufpected; you have the fenfe to be a Brunonian, and the honefty to acknowledge it : You are at the bottom now againft blood-letting, are you not? You know that in nine of ten cafes people bleed and blifter, and vomit and purge, becaufe they do not know what to do, and are afhamed to let the fick people alone: You are fenfible that furgeons bleed always when they are in a hurry, and are fure to bleed when a man is in a fit, or in a faint: You know that at fuch time bleeding is not merely a harmlefs piece of Sangradoifm, but is more likely to kill the patient than to fave him: You have therefore written a long chapter, which, by men of education, will be looked upon as a fine piece of irony againft " That injurious abffraction of the vital fuid, whicb is " now eftabli/bed by immemorial practice!!!" and very happy am I to fee this immemorial practice fo cunningly ridiculed by a man of fuch authority in furgery as Mr. Bell! Now that I have had the good fortune to difcover your real defign, and this happy opportunity of explaining it, your manner of writing will have this double advantage, that while men of education, who underftand what compofifition is, will regard your chapter as a very finifhed piece of irony, the fimple fhop boys will read it as a literal and true reprefentation of the dangers of that difficult and important operation of phlebotomy. Horror and confufion will be painted in every countenance! the apprenti-
ces will look back with apprehenfion to the dangers they have efcaped! and will make fincere vows for the future.

- When I confider all circumftances, I muft regard the chapter I have reviewed as-


## AN ESSAY AGAINST BLOOD-LETTING;

where, what might have been miftaken for ignorance and folly, is confumate wifdom; where, in place of incorrect language and confufed ideas, we have a vein of finer irony than Swift ever wrote! for his irony is fo poorly managed, that you very generally perceive his meaning-in the very title of it! But here is no bungling! the fatire upon thofe whoftick to the fpafmodic doctrine of Cullen, the drenching diet of the Italian phyficians, and the fanguinary practices of Sydenham! is fo curioully wrapped up in myftic language, that no man has ever difcovered the true intention of the chapter, except myself !!! Pardon me, Generous Sir, ftealing my little portion of literary fame from one who can fo well afford to fpare a great deal ; for now I perceive,-and the whole world will acknowledge it, that-the modern practice of preventing the abstraction of the vital fluid, upon every triffling and accidental occurrence in practice, is entirely owing to, and proceeding from, the various writings of that eminent practitioner Mr. Benjamin Bell.

## ON HERNIA.

> But, in thefe cafes, We ftill have judgment here; that we but teach Bloody inftructions, which, being taught, return To plague the iaventor.

Honoured Sir,

Is your laft chapter, you have managed whatever knowledge you may be poffeffed of with a wonderful degree of economy. You regard us, perhaps, as little better than a horde of favages, ignorant not only of furgery, but even of bleeding, and phlegms, and lancets ; and, like the Abyffinian Bruce, when called to bleed and vomit the fifteen queens of Senaar, you make a great parade among us of a very little medical knowledge.

Though you are equally original on all fubjects, your perverfe genius fhines chiefly in a fort of natural talent for the burlefque; for, without labour or pains, you make the moft trivial fubjects ludicroufly important, and the moft important fubjects, as Hernia, you make completely ludicrous. You contrive bloody operations for imaginary dan ${ }_{*}$ gers, and make thofe operations bloody and horrible which
were not fo before. You have the happy talent of treating the whole fcience in a ftyle fo incomprehenfibly oracular, that no ordinary reader can guefs at your meaning. Your words are fo broken, bruifed, diflocated, and diftorted, that you feem to have exerted the whole force of your chirurgical abilities upon them. Ordinary ftudents have no ufe for the reafoning faculty, which, confidering to whom you write, is no fmall advantage. When they take up your books, they foon learn to lay by their wits, to overlook the matter, and to read ftraight forward, words-words-words.

## SECTION I.

## Of Hernia in general.

" The term Hernia might with propriety be applied to " every fwelling occafioned by the dijlodgement of parts " from thofe boundaries witbin which in a fate of health they " are contained; but the general acceptation of the term, " implies a tumour produced by the protrufion of fome part " or parts from the cavity of the abdomen.
" The parts in which thefe fwellings ufually appear, are " the groin, fcrotum, labia pudendi, the upper and fore " part of the thigh, the umbilicus, and in different points " between the interstices of the abdominal mufcles.
"If the fituation of fuch tumors be various, the vifcera " which produce them are fill more fo!!! inftances having * occurred of the ftomach, uterus, liver, fpleen, and blad-


" der, being found to form their contents. But a part of " the inteftinal canal, or a portion of the omentum, are " from experience known to be the moft frequent caufe of " their formation ! ! !
" On each fide of the under part of the abdomen imme"diately above the pubis, two openings are met with in " thefe tendons, intended for the paffage of the fpermatic " veffels in men, and for the ligaments of the womb in " women.
" Although thefe rings or openings have been commonly " defcribed as pafing tbrough not only the external oblique, " but the tranfverfales and internal oblique mufcles alfo; " yet it is now certainly known, that it is in the tendinous " parts of the external oblique mufcle only, that any fuch " opening exifts.
" From the inferior border of the tendinous part of the " external oblique mufcle, a detacbment of fibres is fent off'!" " which, after affording a firm covering to the inguinal "glands //! are loft in the fafcia lata of the thigh : And " the under edge of this tendon being folded inwards, ob" tains the appearance of a ligament."

Among the difcoveries of the prefent century, we beg leave to record the following defcription of a certain procefs of the peritoneum, never heard of hitherto: Or rather we recommend it to Dr. Monro to affimilate this with his own invaluable difcoveries, to print it in the next compact folio he may have occafion to publifh, and efpecially to be careful to mark the date of it;-for it is now a well known fact, that difcoveries, like wine, improve by long voyages or long keeping. Let him mark it as the Romans did their

Falernian, with the fecond confulfhip of -
He owes this homage to-" the puller down and fetter up " of __." Here I copy only the mere non clare conftat enunciation of the difcovery, as it is expreffed in the following paragraph, which the Profeffor may greatly improve:
" Behind the peritoneum lies a quantity of loofe cellular " fubftance, by authors commonly termed its appendix. In " fome parts this fubftance is filled with fat; and in others " it is empty, and can eafily be filled with air !!! *",

In the following paffages we have a moft diforderly gathering of words-protruded inteftines, fwellings and ftrictures, tumours and contents ;--ftrangulations, conftrictions, relaxations, and rarefactions, and condenfations;-and hot
$\dagger$ Thefe, as we have already faid, are the ufual seats of hernia; but " it fometimes happens, that parts of the vifcera are protruded between the " interfices of the different mufcles of the abdomen : Thefe, however, are " not frequent occurrences.
" In whichever of thefe fituations a protrufion of any portion of the in" teftines occurs, except in the cafe of the hernia congenita, as all the vif" cera are contained in the manner already defcribed within the peritoneum, a " portion of that membrane, it is evident, muft be carried down together " with the parts protruded; and in every fuch inflance, it is this portion of " the peritoneum which goes down along with the gut that is termed the " Hernial Sac. The fize of this fac is various in mifferent subjects, " and in different fages of the fame diforder.
"On the firft appearance of the difeafe, the fac is commonly of no very " confiderable fize, as fuch fwellings feldom acquire any great bulk at once : " But by repeated defcents of the bowels, the fac comes to be pufhed lower " and lowver, till in fome inftances its bulk becomes very confiderable indeed; " and when in this advanced period of the diforder the fac bappens to be " laid open, it is found to contain either large quantities of omentum or " inteftine, and frequently large portions of each."
and cold, and poultices, and ice and fnow :-Obfervations, and experience, and fuppofitions; and theory, and pracice! !! all hurrying about like flaves at the bidding of their lord;-or, rather, like hounds at fault, with a bad huntfman at their head, yelping and hunting about for the game, which they frighten with their fenfelefs noife.
"Wboever attentively confiders the nature of thefe difor" ders, and the means generally found moft effectual in re" lieving them, will probably coincide witb us, in imputing " the bad fymptoms which occur in cafes of bernia, to a " ftricture induced upon the protruded parts!!! By many, " bowever, a contrary opinion has been inculcated; and " the principal caufe of the various fymptoms which occur " bere, bas been fuppofed to be, inflammation, or fome fpaf" modic affection of the protruded parts, independent of any " ftricture of the parts through wbich thefe bave paffed *."

* "That inflammation of the prolapfed bowels, whatever may original" ly have produced it, will in general terminate in all the fymptoms of " ftrangulated hernia, no perfon will deny; but that ftricture of the fur" rounding tendons is by much the moft frequent caufe of them, we think " fo very obvious, as to render it quite unneceffary here to adduce any argu" ments in fupport of the opinion: This, however, we muft remark, that " even on the fuppofition of the origin of all the mifchief lying in the pro" truded parts themselves, and not in any ftricture of thofe through which " they pafs, ftill the impropriety of warm applications muft be equally ob" vious, as by the rarefaciion they induce, they muft always tend to produce " an additional degree of fwelling in the contents of the bernial tumour.
"The general warm bath, by tending to relax the confliziaion on the pro"truded intefines, has frequently had a confiderable influence in promoting " their replacement; but poultices, and other means of applying local beat to " the fwelled parts, although commonly smployed, are undoubtedly very prgiw-

Having run through this extenfive fhoal of words! let us now infpect our log-booo, or journal of obfervations, made during the paffage : Firf, We have a definition of hernia, "The diflodgment of parts from thofe boundaries in which they are contained," fo grandly metaphorical, that we do not know how to exprefs our admiration of it -it is even glorious-it founds like-the diflodging of Jourdan from his lines. Next comes a perfpicuous and elaborate defcription of "The rings or openings ! passing through the oblique mufcles," and "Of the fpermatic cord again in its turn paffing through the rings," and "Of the detachment of fibres fent down from the rings," which is meant, no doubt, to make up the fimile (for the metaphor is now blown up into a fimile), of a detachment, like a ferjeant's guard, fent down to keep the ring or gate
" dicial. On the conftricted tendon they can have no influence, for it al" ways lies fo decp as to be out of the reach of every local application of this " nature: And as the heat conveyed by fuch remedies, muft for certain "tend to rarefy the contents of fuch fwellings, by their thus producing an in"creafe of fize in the tumours to which they are applied, inftead of anfwering " any good purpofe, on this principle it is cvident they muft do harm; and " accordingly, whoever will attentively obferve their effects, will find this to " be the cafe.
" Independent, however, of any theoretical reafoning, I can with certainty " aver, that in prafice, much more advantage is obtained in diforders of this " kind, from cooling applications, than from thofe of an oppofite nature. " In different inflances I have ventured on the application of ice and fnow, " fometimes with evident advantage, and I never faw them do harm.
"When no probability remain of fuccefs from the employment of the ", means already mentioned, the divifion of the parts producing the ftric-
" ture is then our only refource."
of the abdominal vifcera: and this muft furely be for " the prevention of future descents *."

Then we have defcriptions of various other herniæ, as ventral hernia, or hernia in the middle of the belly, "proceeding from parts of the vifcera! being protruded in different points between the interftices of the different mufcles of the abdomen." And we have a difcovery which Mr. Bell's old mafter, Dr. Monro, will certainly fteal from him one day or other, if he do not mind his dates! we mean, the difcovery of the thing " which anatomifts commonly "term the Appendix of the peritoneum!" We have, next, a clear, diftinct, and very interefting explanation of the herniary sac ! the hernia congenita ! the nature of the strangulation ! viz. " that it arifes merely from the conftriction of the ring!" and we have a profoundly philofophical difquifition on the effects of heat, and cold, and poultices, and snow, and of many thiugs which our philofophy cannot explain ; and we are now affured of the heat and cold of poultices affecting both the tumour, and the winds which are contained within the tumour! without affecting the ring of the abdominal mufcles, by which the tumour is embraced and ftrangulated. We have, in fhort, a body of pathology on the fubject of hernia which Richter might envy ! and John Bell fteal ! and Monro claim ! and Dawplucker record.

I perceive, Honoured Sir, that you have abilities far fuperior to the tafk you have undertaken: You call this theoretical reafoning, and no wonder you defpife it: You mean to perfuade others that theory is ufelefs, and no

[^11]queftion, you will fucceed; for you have affirmed, that animal heat, which we find invariably the fame in all circumftances, whether in Prim Blagdens, beef-baking, hot bath; or in Siberian deferts! in the cold, or in the hot fit of a fever ! in inflammations, or in palfies! This heat, which philofophers have never been able to raife or deprefs more than fix or eight degrees! (the body being alive,) you, Mr. Benjamin Bell, can fo raife or deprefs, by a little cold water or a bread poultice applied to the fcrotum, as to rarify or condense the air within the hernia!!!

When your namefake Jonathan Bell wifhed to ridicule the plates of Euftachius (which you and $I$ and the whole world admire), why, Sir, he had fo little reverence for public opinion, as to compare " the drawings of the kidneys with butter prints," and the heart, and all its inner works of columnæ carneæ, and Euftachian valves, " with patent washing machines!" When the celebrated Dr. Hunter ridiculed the old phifiologits, he compared their notions of the heart and of the ftomach " with stewing pots and steam engines." But you, Sir, have contrived to outdo all ludicrous comparifons by your feriou one,of refembling a ftrangulated hernia to a glass cracker ! ! ! which witty imagination gives you infinite advantages in proving! that theory, and all thefe fort of things,-fhould be-EXPLODED!!!

## SECTION II.

Of the manner of reducing HERNIA, or " of reducing the protruded parts witbout the intervention of incision."
" Various methods have been attempted by practitioners
" for the removal of fricture in thefe diforders; all of
" тнем, however, may be comprebended under two general
" heads.
"I. Sucb as effect a reduction of the protruded parts, " without the interpofition of incifion, or any chirurgical " operation properly fo called; and,
" II. A divifion of the parts producing the firicture, fo as " to admit of a replacement of the deranged vijcera, confti" tuting what is termed the Operation for the Hernia.
"The remedies to be employed for accomplifhing the " firft of thefe, are, a proper poffure of the patient, with the " manual aljftance of a praclitioner; blood-letting; ftimu" lating glyfters; opiates; the warm bath; and proper " applications to the tumor itfelf.
"So foon as the afffance of a praclitioner is defired for " the removal of fymptoms! in cafes of bernia, the firft cir" cumflance requiring his attention, is, the placing his patient " in fuch a pofture as will moft probably favour the return " of the protruded parts!!! Thus, when the tumor is in the " groin, or in the fore part of the thigh, the patient ought
" to be fo placed, as to raife bis thigh and legs confiderably " higher than bis bead and trunk; that is, he fhould be " placed almoft perpendicularly upon bis head.
"This pofition caufes almoft the whole quantity of inteflines
" to hang or swing by the protruded parts, which fre" quently proves a means of effecting their reduction.
" Placing the patient's feet over the fhoulders of another
" perfon, wbile at the fame time his body is allowed to bang " downwards, and caufing him in this pofture to be a good " deal jolted about, has on fome occafions been known to " anfwer when every otber means has been tried in vain.
" For the fame reafon that in the inguinal and femoral " hernia the pofition now mentioned is more advifable " than any other, the ufual erect pofture of the body be" comes moft proper in cafes of exomphalus or umbilical " rupture; and again, a horizontal pofture is moit likely to " prove ferviceable in cafes of ventral hernia.
"Wbile the patient thus remains in the moft fuitable pof-
" ture according to the Jeat of the diforder, the furgeon
" fhould at the fame time endeavour to affift the return of
" the gut or other parts, by means of gentle prefure with
" his bands-and-fingers."
Thefe prudent and judicious directions-honoured Sirfor reducing hernia are abfolutely invaluable. We know of no book where fo much is written on this fubject, and there is abfolutely none where the fame directions are given. But while the young furgeon muft feel himfelf infinitely indebted to you for the minutenefs of thefe directions, there are perhaps a few particulars forgotten, and fome things which will admit of improvement.

Nothing can be more agreeable than to fee a man of yothextenfive knowledge condefcending to the moft trivial things : How kindly attentive, for example, how condefcendingly mindful are you of the young furgeon's ignorance, when you direct him to place the feet of his patient, not over his own fhoulders, nor over the patient's fhoulders, but "over the fhoulders of another perfon?" for had he attempted to put them over the patient's fhoulders! it is very obvious, that, in Hernia efpecially, ill confequences migbt bave occurred; and had the furgeon put the patient's legs over his own fhoulders! he would have been obvioufly embarrafled by it!!!

You are fo condefcending as to illuftrate this point fill farther, and to do- away all ambiguity, by directing " that the patient flould be placed almoft perpendicularly upon his head!!!" It is on the fubject of this, the moft decided of all your directions, that we are impatient to fuggeft fome improvements, not mere conceits of our own, but practices of the moft ancient and refpectable furgeons both of Europe and of Arabia, now unhappily forgotten, or at leaft difufed.-It is very obvious that the chief difficulty lies in keeping the patient " perpendicularly on the crown of his head," and in "caufing him to be a good deal jolted about in this pofture." Now thefe objects are both accomplifhed by the Arabian method; for the Arabians tied the patient by the neck and heels to a ladder; then they fet the ladder upright!!! by which ingenious contrivance this great object was achieved. The man was fixed upon the ladder with his head downwards, like the tutelary faint of Scptland on his crofs, praying for his ene-
mies; and the jolting was accomplifhed by tiwo good fout fellows taking the ladder by the two fides, and fturping about with it through the court yard, giving the fick man now and then a dafh of water, frefh from the pump, to keep him cool.

This contrivance will never fail the furgeon in time of need, for a ladder is always at hand; and this pofture manifefly " caufes almoft the whole quantity of inteftines to bang pr fwing by the protruded parts." Celfus was in the cuftom of shaking ! not only till the guts went back intothe belly, but till the feveral turns fubfided into their proper places, and were quite friendly and comfortable with one another! " He fhook till they were friends."-" Repofitis omnibus leviter homo concutiendus eft, quo fit, ut per fe . fingula inteftina in fuas fedes deducantur, et in his confidant." Celfus, Cap. XVI.

But an ingenious furgeon will never be at a lofs, efpecially if he be as well acquainted, as you feem to be, with phyfics, and all thofe refources which fcience affords. The hernia we are to reduce is fuppofed to be in the groin. The point is, "to make almoft the whole inteftines fwing " or hang by the protruded parts." How would it do to fix the patient to the arm of a windmill? The whirling would fo affect his nervous fyftem, as to biunt the painful fenfations more effectually; perhaps, than Moore's inftrument for compreffing the feratic nerve. If he were tied near the extremity of the fail, the volocity of his motion would be proportionably great; and the centrifugal force being proportioned to the velocity, he would, while he were at the bottom of his round, "have the in-
teftines hanging and fwinging by their own weight;" and even when he were at the top of his round, the centiffugal force would fill operate! Befides, who ean pretend to calculate the force of the air condenfed againit his body in this rapid motion? It might be as furprifing as that of the wind of a cannon ball !-In this country, where the only objection to windmills is their driying too faft, we fhould feldom be twenty-four hours without weather favourable for the reduction of hernis. The patient might whiftlo when, he felt the bowels teduced, or when he wanted to be taken off. One good confequence I fhould expect from this invention, is, that as herniæ return very frequently, patients would foon learn a fort of feat ! and would be able to take hold of the arm of the windmill whenever occafion required ! make a turn or two in the air! and ftep down again upon terra firma. We might invent a fwinging girdle for beginners, like that which the Mexicans ufe when they take the amufement of the flying trees; and would you condefcend to honour your ever obedient Dawplucker with your patronage, he might obtain a patent for the girdle, and-flying for hernia! become as common as swinging for the consumption!!!

But, Sir, we are not fo full of our own conceits as to forget your very fenfible obfervation, that each particular hernia fhould have its peculiar pofture for fhaking in! for that rule "is obvioufly founded on the employment of fucb reafoning as experience and common fenfe feem evidently to fupport." The windmill is admirably adapted to hernia in the groin. -The ladder! is manifeftly a method fit for reducing all

[^12]kinds of hernix ; for with it you have the man fo fixea, that you can turn him as eafily as if you had him on a fork. Yet we will acknowledge that there are other difficulties, becaufe there are various herniæ. Indeed you yourfelf very prettily obferve, " that a borizontal poflure is moft likely to prove ferviceable in ventral bernia,"-and that " again the ufual pofture of the body becomes more proper in examphalos or umbilical rupture."-For fhaking in the horizontal pofture, certainly nothing could be equal tomossing in a blanket! which would "fuit, not ventral hernia only, but be of univerfal application!" The patient " might not only remain in the moft fuitable pofture, according to the nature of the diforder," but be Jaken in every poffible pofture, whatever the nature or feat of the :diforder!!! And as for the Examphalos, or Umbilical rupture, where the ufual pofture of the body " becomes moft proper,"-the only way to have the patient effectually fhaken, would be-to get a PIPE AND tabor, and let him dance the tarantula!!!

## SECTION III.

Of the Critical Moment in which this Operation foould be performed.

Like a writer well fkilled in dramatic efrect, when about to bring forward the cataffrophe of your piece, you do it with becoming dignity. Death is accompanied with all his pomp of horrors. You defrribe the gangrene which precedes death in a very affecting manner.
" If the protruded parts have not of themfelves gone en${ }^{n}$ tirely up, their return is now in general eafily effected by a " Jmall degree of preffure, and the patient then difcharges " freely by ftool; but the cold fweats increafing, the hick" up turns more violent, and deatb itfelf is at laft ufhered in " by-(the ufher of the black rod, no doubt! and) by its * ufual forerunners, fubfultus tendinum, and other con" vulfive twitchings."

But when you proseed to reprefent that critical moment in which you are to forfake all hopes of faving the patient, and to propofe to his friends the moft doubtful and cruel operation in furgery ! that operation which muft decide the exiftence of the patient! you fpeak with fo much decifion, and your opinion, though thus determined and refolute, is yet urged with fo much good fenfe, humanity, and real feeling!-gentlenefs and manlinefs are fo commingled! -that we know not which moft to admire. After reading the following paflages, the young furgeon will not go fearfully to this terrible work, but ftrengthened with all your natural fenfe! and dear experience! will fay within himfelf, I trust I have a good conscience!
" This, it may be remarked, is one of the nicefl points in " practice that a furgeon has ever to determine upon: I " mean the exact period at which, in cafes of hernia, the " more gentle means fhould be laid afide, and the opera" tion be put in practice.
" But we ought to be directed here, as in every critical " cafe we are employed in! by the refult of experience only! " Thits operation, as is the cafe indeed with every other " of equal importance! is no doubt attended with fome ba-
" zard! but the danger accruing from it has by moft prac"titioners been more magnified than it ought to be: For " although no perfon of character can in any cafe of hernia

- be fuppofed to have recourfe to it; before other means have " been tried; yet, fo far as from experience I am able to " judge, the rijk attending the diforder itfelf when the ope" ration is long delayed, is infinitely greater than is com" monly experienced from the effects of the operation con" fidered abftractedly."

I cannot but admire here, gentle reader, how curioufly Benjamin proves, firft, what it is that conftitutes the importance ! of every operation, viz. "The hazard," and how he proves (" by applying this to every cafe of equal importance") that all great oprrations " are hazardous," and next, how he proves that it is dangerous to confider an operation like this! abftractedly. Ah! Benjamin, Benjamin ! leave off abftract fubjects, keep to that good rule which you have laid down for yourfelf in your pre. face;-always when the clouds gather around you, look back into the Binacle (into the Preface I mean) where you have placed the compafs by which you are to fteer this ftately fhip of yours. In your Preface we find the following precious maxims on record.
" Were I to endeavour to trace the fucceffive improve" ments which have been made in furgery within thefe * laft fifty or fixty years, I fhould often find it difficutt, and " fometimes impofible, to determine by whom the pracice, " as it was eftablifhed, was introduced; and in order to give " a fair account of the progrefs of the different operations " of furgery from their rude to their improved ftate, I " fhould be under the neceffity of entering into a full
c)
" cbronological bijtory of each. While inquiries of this kind " could ferve no ufeful purpofe, they would tend to render " more prolix a work which, from the variety of its fub" jects, muft neceffarily extend to a great length. I fhall " therefore in general decline them.
" Sucb of my readers as are fond of theoretical difquifi" tions, will, I am afraid, be frequently difappointed,
" When the fubject under confideration can be rendered more " clear and intelligible by rT, I have occafionally employ" ed fuch reafoning as experience and common fenfe feem " evidently to fupport! but I have every where ftudioufly " guarded againtt entering on the difcuffion of doubtful " and fpeculative opinions."
This is the true card for you to fail by. Never go fo far back as fifty or fixty years in the hiftory of your profeffion ;-it is ufelefs and troublefome. Never pretend to deliver the hiftory of any operation; that might alfo, in various ways, involve you in trouble. Never meddle with chronologies and dates of difcoveries ;-leave that to profeffors and difcoverers, who have an intereft in dates, and who take annual fureties of their friends for the difcoveries of the feafon as regularly as Lords lift their rents. Never enter into inquiries;-they are the moft puzzling and perplexing things in the world: And, finally, never employ any reafoning but which experience and common fenfe seem evidentiy to fupport,-and you will bowl on as fmoothly as youp heart can defire.
" Were we able from the attending fymptoms to deter" mine the exact period at which the operation ought to be " performed, no kind of difficulty would occur from it; but " this is fo far from being the cafe, that the moft experiencel

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" pracitioner cannot with any certainty decide upon it. In " fome inftances, herniæ with every fymptom of ftrangula" tion, continue for fix, eight, or ten days !! and after all, " the protruded parts are at length replaced, and the " patient does well; and in many fimilar cafes, when the " operation has been the means of relief, although the very "worft fymptoms have fubfifted for feveral days! yet on " laying the parts open, no appearances eitber of inflam" mation or gangrene have been detected!!!
"On other occafions, again, the fame fet of Symptoms, * with perhaps no greater degree of fwelling or tenfion in " the piarts affected, end fatally in a very fhort fpace of " time. In fome fuch inflances, the rapid progrefs of the a diforder is very furprifing; the face of eight-and-forty " hours hardly intervening, from its firft attack till the pa" tient's death: I have even known the inteftines become " perfectly gangrenous in the courfe of one day from the " time of their firt expulfion!!!
" Every practitioner muft be fenfible, that this! is the real " state of the ouestion? and! if! it! is! fo! it ! muft! " at once! become evident ! that confiderable delays muft in " fuch critical circumftances be always attended with great " bazard! and As the real danger to be apprebended from the " operation itfelf, is trifling when compared to the rifk " which long delays ufually produce, it ought therefore, I " think, to be laid down as an eftablifbed maxim in tbis part " of practice, Always to proceed to the operation, if in the " fpace of a very few hours (hear! hear!) blood-letting, and " the other remedies pointed out, do not prove effecfuail. " Two or three bours at fartbeft, (hear ! hear!) even when

* the affiftance of practitioners is early applied for, is per" haps the greateft length of time! (hear! hear!) that " fhould ever be occupied with trials of this nature."

Now, gentle reader, I turn from Mr. Benjamin Bell to give you fome ferious advice concerning the moft dangerous operation in furgery. You will ponder what I fay for the intereft of others, if furgery be your profeffion! for your own fake, if you feel only your own fhare of the common danger.-Hear now the rule of practice which this ralh man delivers to young furgeons,-" Always proceed to the operation, if, in the space of a very few hours, you do not fucceed!!!" I will venture to affirm (without having any claim to that deep reading and extenfive practice which Mr . Bell has reafon to boaft of), that this is the moft ralh and dangerous rule that ever was announced in any book in our profeffion. It is againft reafon and common fenfe; it is oppofite to the opinion and practice of every judicious furgeon; I appeal from Mr, Benjamin Bell to the whole medical world! I appeal from his abfurd conclufion to his own premifes, which direct us to a practice quite the reverfe of this.-Firft, The inteftines in thofe cafes of fudden gangrene (allowing the fact to be exactly as he flates it), muft be gangrened paft redemption, before the parts could be cut open! even although the furgeon fhould operate with all the guilty precipitation " of an interefted and ignorant practitioner." Seconly, In many cafes the operation has been (as Mr. Bell acknowledges) " the means of relief, although the very worft fymptoms had fubfifted for feveral days!" This furely is a reafon rather for delay! for performing the operation
late! And, thirdly, Mr. Bell has feen the fymptoms of ftrangulation continue for eight or ten days, and yet after all the protruded part replaced, and the patient do well! which is an argument for not operating at all, or at leaft for affuring ourfelves of the figns of danger, before we pronounce, that there is danger, or perform this horrid opera-tion.-Gentle reader, If you engage in furgical operations, however cautious you may be, affuredly you will, from time to time, have reafon to find fault with yourfelf! Beware, then, of this defperate-rafh word,_"A FEW hours."

## SEC'IION IV.

OF THE OPERATION FOR HERNIA,
"Or that divifion of the Parts producing the Striclure, so as to admit of $a$ replacement of the deranged viscera, confituting what is called the Operation of Hernia."

Honoured Sir,
I have ftudied all your operations, and I well remember, that every one of them, great and fmall, neceffary and unneceffary, of old or of new invention (except that one which begins with day-light in perfection) begin with " a table of three feet high." But this operation begins fublimely, like an ancient facrifice, or an auto de fée, with a hymn or fong.
" A table of a convenient height;
" Being placed in a proper light."

To match thefe lines with any other two equally elegant, we find impoffible, and muft be contented with a couplet, which is, however, highly explanatory of them :
" Thoughts ! all fo dull, fo pliant in their growth,
" They're verfe,-they're profe,-they're nothing,-and they're both."
" A table of a convenient height! being placed in a pro" per light! the patient muft be laid upon it."-" And in " order to afford as much empty fpace as poffible for the " return of the protruded parts, the patient fhould be ad" vifed to empty bis bladder entirely; and the parts having " been previoufly fhaved, an incifion muft now be made " with a common round-edged fcalpel through the fkin " and parts of the cellular fubftance, beginning at leaft an " inch above the fuperior extremity of the tumour, and " continuing it down to the moft depending part of the fcro"tum *."

## continuation.

* "Even althought the tumour does not extend to the bottom of the fcrotum, " the parts fhould be laid open in the manner direIted: By a free external in" cifion the operation is allowed to be finifhed with more eafe and freedom " than when the firft opening is not fo large; it does not produce much " more pain than a fmall incifion ; and by being continued to the bottom " of the fcrotum, the matter produced in the upper part of the sore is " prevented from collecting below, which it is otherwife ready to do.
"The operator now goes on to divide flowly the reft of the cellular fub" ftance, together with fome tendinous kind of bands, which, unlefs the " diforder is very recent, are univerfully met with, either loofe upon the fur" face of the hernial fac, or, on fome occafions, pafling as it were into its " fubfance. Even this external incifion of the integuments ought to be " made with great caution : For although in by much the greatefl propor-
" tion of hernial fwellings, the fpermatic vefels lie bebind the protruded parts,

I who have fo often praifed you, am lothe to differ with you; and when I do affume a ferious tone, you may believe the occafion ferious. In thefe paffages, though you do not reprefent the rapid decifion, with which every great operation in furgery fhould be performed; though you linger in your defcription, and exprefs yourfelf with hefitation; yet yours is not the hefitation of fear or modefty. Your page is like a ftill with fimples in it ; to every drop it takes a minute! but your directions are as bloody as if you uttered a torrent of words, expreffive of all the enthu" yet on fome occafions they have been found on the anterior part of the " tumour; fo that in order to avoid the rifk of wounding them, fo foon as " the fkin is divided, the remainder of the operation ought to be done in " the moft cautious manner, care being taken to avoid every large blood-veffel et that makes its appearance.
"If we attend only to the ufual conformation of thefe parts, the hernial " fac, we would fay, ought never to get behind the fpermatic cord : But we " know well, that in no part of the human body is nature more apt to /bow " fuch inclination to defert her ordinary courfe, than in fome circumfances re" lating to the tefticles and their veffels.
" I fhall not here enter into the difcuffion of the manner in which fuch a " circumfance may be produced; but, as I am certain that the fact has hap" pened, and as it may therefore occur again, I confider it as an additional " argument for the propriety of dividing the hernial fac in the cautious man" ner here directed.
" Good eyes and a fteady hand are in no operation more requifite than " in this : With thefe, any prafitioner acquainted with the anatomy of the " parts may be fure of doing the operation properly, and without them the "beflanatomifl muft undoubtedly go wrong.
"So foon as an opening is made quite through the fac, a circumflance of " which we are made certain, as was already remarked, by a probe paffing "cafily in, it ought then to be farther enlarged, till it is of fuch a fize as "to receive the fore-finger of the operator's left hand.
fiafm of a daring and hardened furgeon. The difference betwixt your defcription and that of a bold operator, is juft that which diftinguifhes an affaffin from a brave man! You write bloodily, though not boldly: you fpeak not like a regular furgeon, performing a regular operation where there were rational hopes of fuccefs, but like a defperate man, carelefs of every thing, and afraid only of being affronted, or, in other words, "embarraffed" in the midtt of a public exhibition ! you write like one who had
" Hitherto the ileum has been commonly fuppofed to form the Jubfance " of the greatelt proportion of fuch tumours; later and more accurate ob" fervation, bowvever, renders it probable, that the cecum, appendix vermi"formis, and part of the colon, are more frequently contained in the her" niary facs than any other portion of the Gut.
" The fac being laid fully open, the parts contained in it ought now to " be examined with the nicefl attention, \&c.-In making the reduction, it both " anfwers the purpofe better, and is lefs likely to do mifchief, applying the " fingers to that part of the inteftine connelied with the mefentery, than to " the convex part of the gut. While the reduction is going on, the pa"tient's thighs and loins fhould be ftill more elevated than they were " during the preceding fteps of the operation; as this pofture of thefe " parts tends much to facilitate the return of the protruded intefines to the " abdomen.
" As the tendon of this mufcle runs in an oblique direction from above " downwards, and as the opening through which in cafes of hernia the " parts protrude, is formed merely by a feparation of the tendinous fibres " from one another, the diredion of this opening is of courfe the fame with " that of the tendon; that is, it runs fomewhat obliquely from the fpine " of the ileum to the os pubis.
" In enlarging this paffage, then, for the reduction of fuch parts as " have paffed througb it, as a tranfverfe fection of the tendon is by no means " neceflary, the knife fhould be carried obliquely upwards, fo as merely to " continue the natural feparation of the tendinous fibres."
been often caught and entangled in difficulties from which he had no other way of difengaging himfelf than by a flap-dafh ftroke of the knife. You order the young furgeon to make an incifion as large as the parts will poffibly allow ; a rule directly the reverfe of that by which other furgeons are guided : but you are your own cutting Conductor *! you cure all difeafes by cutting! and in cutting, you refolve all difficulties by a crofs ftroke of the knife!!!
" The finger was recommended as the beft director for " the knife! in opening the fac, and in dividing the tendon " it is equally neceflary. By infinuating the finger into! " the aperture in the tendon immediately above the pro" truded parts, the point of the blunt biftoury is eafily in" troduced upon it; and in this manner, by keeping the end " of the finger always a little before!' the biftoury, the open" ing may be enlarged to any neceffary extent without any " rifk of wounding the contiguous parts.
" In general, a very fmall enlargement of the natural " opening in the tendon is found fufficient for the reduction " of the gut and other parts: But the fize of the opening " ought by all means to be fully fufficient for the end " propofed; for it is better to exceed in making it fome" what too large!!!"

This fcene becomes more and more fhocking. You are feen now, fteeped in the true colours of your trade, up to the very elbows in blood! You are enfuriated by oppofi-

[^13]tion ! the words adhefion, ftricture, gut, and fac, excite proportioned fury ! and you exclaim, tear, cut, clip, de-ftroy.-Tear the adhefions; cut every thing;-furgery confifts in cutting !-and the beft furgery is to cut every thing ! ! !
" If upon introducing the finger any adhesions of the " out to the contiguous parts are difcovered, the incifion in " the tendon ought to be larger! than might otherwife be " neceffary, with a view that the finger may be freely " admitted fo as to destroy fuch adhefions as it can " reach !!! for unlefs they are removed! complete fuccefs " from the operation cannot be expected.
" Independent of fuch adhefions internally, it frequent" ly bappens, by long confinement in the fcrotum, preffure, " and perhaps other caufes, that ftrong adhefions are form"ed among the parts contained in tbe fac itfelf; and before " they can be with propriety reduced, it is always neceffary " to attempt their removal!!!
"When adhefions of this kind occur, as they fometimes " do, between different parts of the protruded gut, the great"eft caution is neceffary in feparating them: But connec" tions of this nature between one portion of the inteflinal ca" nal and another, are feldom very firm, and are commonly "eafily separated by the fingers alone!!! and when the " connection is formed by means of long filaments! which " is fometimes the cafe ! the eafieft method of removing them " is to cut them, either with a pair of fcifars! or the bif" toury!!!
"When, again, adhefions occur between the gut and " bernial fac! or between the gut and omentum! if the ri-
" laments producing the connection cannot be otberwife " removed, as there is no great hazard in wounding the " omentum, and ftill lefs in hurting the fac, a very fmall " portion of thefe may be dissected off ! ! ! and returned " with the gut into the abdomen !!! and in the fame manner, " when the omentum adheres fo firmly to the fac as not " to be feparated in any other manner, no danger can ever " accrue from the fac being fomewhat encroached upon!!!"

Drive on, Sir-Cut-clip-tear-remove-deftroy!!! This is furgery indeed-rampant furgery.-Your recommendation and certificate of the finger being the beft director, may be very honeft and right ; but if the ftricture be fo very flight that this well recommended finger can go before, we fee no reafon why the cruel biftoury fhould follow after. Your direction of keeping always the finger a little before the biftoury is rather unexpected from one who has told us " that the stricture of the ring is the fole caufe of the ftrangulation?" I would not be guilty of carping at mere errors in words; I fear that there is proof in thefe paffages of very ferious mifconduct ! of your having performed this operation where the hernia was not truly ftrangulated; and of this I am entirely perfuaded, fince I find you declaring, " that the protruded parts may be fometimes reduced without any neceffity for enlarging the opening through which they have paffed from the abdomen." This rule is perfectly fhocking; it muft incline the young furgeon to pull out pieces of the inteftine, with the expectation of pufhing them in again! pray, Sir, is it prudent to puifh the inteftines when they are expofed naked to this roughufage,-the fac open,-and the ftricture
which confines and ftrangles the inteftine as yet unreliev-ed?-Is not this contrary to your own rule, of its being " better to exceed, and to make the opening in the ring too large?"-Is not this cutting open of the fcrotum and fac without opening the ring! Is it not juft performing the bloody and dangerous part of the operation without a motive?-Is not the flight incifion which fhould be now made in the ring the main object of the operation to which all the bloody incifions you take fuch particular pleafure in deferibing are merely fubfervient? Other improvers of furgery have propofed cutting the ftricture of the ring without expofing the bowels or opening the fac. What muft they think of your ingenuity, who open the fac, and expofe the bowels, without any intention of cutting the ring?

Your next rule, viz. that of making the " fmall enlargement of the natural opening in the tendon rather somewhat too large!" is perhaps a compliment to thofe whofe improvement of cutting the ring only you have fo finely burlefqued, by ordering the fac alone to be cut, while others cut only the ring. You are impartial enough in your contradictions, God knows; for when you chance to blunder into any thing that looks like common fenfe, you are as ready to contradict yourfelf as to contradict others. The chief error in performing the operation for hernia, is, the cutting the ring too freely; the confequence is, that in place of making merely as much room as to enable him to reduce the inteftines, the inexperienced furgeon is apt to cut fo incautioufly, that the ftraining of the patient forces down more of the bowels! It is very difficult to pufh them
up again into the belly; it is impoffible to keep them there: And we are inclined to believe that you muft have often performed fuch operations; for you tell us, page 334, " That you have known it more than once happen that portions of the inteftines have paffed out at the openings of the tendon, and remain protruded for 2 confiderable time without being noticed."

The bloody bufinefs next before us of the adhefions is unparallelled, even in your own bouk; not even yourfelf can be your parallel. The young furgeon is advifed to make the "incifion in the tendon larger than might otherwife be neceffary, with a view that the finger may be more freely admitted to deftroy fuch adhefions as it can reach." This is a direction, the abfurdity of which can never be illuftrated by any argument or analogy fufficiently ludicrous. The furgeon is reprefented as fearching within his patient's belly with his fore-finger for adhefions, as familiarly as a nurfe fearches the toothlefs gums of her little one to fee whether it be tongue-tacked!

The notions which you next obtrude upon us of " the inteftines adhering to one another, and to the fac;" and of there being fometimes " long filamentous adhefions, which the furgeon has to clip with fciffars,"-convey to me no idea of a furgeon writing upon operations which he had ftudied and performed, who knew what hernia, or what an adhefion, or what guts, and omentums, and herniary-facs were; but rather it prefents to my imagination a raw and ignorant lad, with very poor talents for our profeffion, and with ideas as rigidly mechanical as thofe, of a lockfmith, fitting down to read about hernias! ftrug-
gling hard with the difficulties of a very intricate fubject, trying to guefs at thofe things which he could not underftand. It is the difficulty, Sir, of underftanding thofe fubjects that has driven you into the difficulties of explaining them; and the perplexities of fuch a writer, falking on from conjecture to conjecture, are fufficient to puzzle the heads of a whole nation of furgeons who have unhappily depended too much on fyftematic books for the knowledge of their profeffion.

You conclude with a very concife fummary of operations for all kinds of adhefions. You fuppofe an adhefion of all the parts, as the omentum, inteftine fac and fcrotum to each other. You direct the cutting a flice off the tefticle, a lump off the omentum, a flap out of the herniary fac, and a piece off the hairy fcrotum, if occurrences rendered it neceffary; and, finally, the thrufting back of the inteftines into the belly, with all this trumpery of rags and flaps fluttering about it. This is juft as notable a thing as can occur in any of the various modern authors who have written on the fubject of the accidental occurrences in this difficult department of cbirurgical practice.

# FURTHER CONJEGTURES CONCERNING HERNIA. 

> I am in blood
> Stept in fo far, that fhould I wade no more, Returning were as tedious as go o'er.

## Honoured Sir,

I once more congratulate you on what mult have been a misfortune to any perfon lefs ingenious than you are. You have laid down for yourfelf a fafe and pleafant rule of reading no book which is contaminated with any kind of herefy againft your own writings; by this you have efcaped ! the knowledge of that doctrine, which explains the condition of an incarcerated and gangrenous hernia. Authors fay, that an intèfline truly ftrangulated is inflamed chiefly at the place where it is conftricted by the ring! That the parts of the inteftine immediately under the ftricture of the ring ufually adhere, before that which is protruded falls into gangrene ! and that when the gangrene does take place, nothing of the found part of the inteftine protrudes.-The found gut, they fay, is never to be feen ! it lies within the abdomen, and cannot be catched with the fingers, nor detained there, nor flitched with needles ! it is faid, moreover, to adhere fo firmly to the infide of the groin, that this flitching is as needlefs as it is impoffible! In fhort it is conjectured that thefe fine operations of few-
ing inteftines, \&c. have been invented by mere clofet furgeons, and copied from hand to hand by profeffed fyftem writers! whofe mode of progreffion is now as perfectly known as that of any other creature, "they fly all in a row like wild geefe." Have I not reafon, Sir, to congratulate you on your ignorance of this doctrine fo infulting to the good old furgery of your friend Laurence Heifter? Your ignorance has given fair play to your ingenuity: Had you known this doctrine, we had loft all the ingenious and very curious conjectures which fill thefe pages.

You have conjectured,-firft, That it will be very prudent to put a ligature, noofe, or halter, round this flippery gut, left it run back again into the belly !-Secondly, You conjecture, although the gut is now empty, mortified, burf, and collapfed, that yet the ring is fo conftricted round it, as to hold it from running up into the belly; but you, " Ne retro eat funis!" left this hank of guts fhould flip back, clap a bridle upon it, and when it is happily bridled, the ring may be fafely dilated !-Thirdly, You have conjectured, that if the found piece of inteftine flipped up!" The gangrenous portion might flip up together with the found !" -Fourthly, You have conjectured "that no good fuppuration will take place in the fac ;" whence you very correctly argue, that all the refractory and rebellious parts of the fac, i. e. all the fore and lateral parts of it fhould be cut out. As many former conjecturers about furgery have advifed the cutting out of the fac of a hydrocele, they might have admired your ingenuity in applying the fame principle to this operation for hernia, but you are unfortunately fifty years too late with this important conjecture,
fo that thofe who fhould have rifen up to defend you are all dead men.

Never till now was it explained what parts were in the operation of hernia to be cut off, nor how the operation was to be finifhed! but you have delivered to us exprefs rules, wherein we find it written down, as your own charter and undoubted privilege, to cut every thing! -we are to cut all the fore and lateral parts of the fac ; "we are to tear the fmaller adhefions of the inteftines with our fingers!" we are to diffect the more intricate adhefions with the knife; we are to clip the long bridies of adhefions with the fciffars ! we are to cut a flice off the tefficle, or a bit off the fac when they adhere to the hernia! and to be plain, this comprehenfive rule relates to all the parts of whatever kind, which may be troublefome to the furgeon, " whofe operation is to be finifhed by thofe parts which are intended to be removed being cut off! ! !"

* Here, my dear Sir, you are too fevere upon furgeons lefs learned or fkilful than yourfelf. I can almoft affure
* " By many it has been recommended, and is ftill a very common " practice, to ftitch up the wound with two or three futures; but as no " real advantage can be obtained from this, and as it has been on fome occa" fions produaive of mijchief, it ought never to be attempted. No perfon will " probably fay, that fuch ligatures ought to be carried fo deep as the ten" don of the oblique mufcle; and if they are only made to pafs through the " external teguments, they can have no effect in preventing a protrufion of " inteftines! On the contrary, it does now and then happen, during the " cure of the wound after this operation, that fmall portions of gut pafs " out at the opening in the tendon, which when the external parts have " not been drawn together are always readily feen and eafily reduced; but " on the fkin being by ligatures made to cover the greateft part of the
you, that (except one) no furgeon ever imagined fo foolifh a thing as confining the inteftines within the abdomen by the mere force of flitches; that no one ever thought of going fo deep with his needle as the ring of the abdominal mufcles; that no one ever thought of ony other advantages from futures than thofe of procuring a fpeedy adhefion, faving the patient from inflammation within the abdomen, and procuring perhaps a fmaller and firmer fcar. You feem, Sir, to accufe the ftitches of wheedling the inteftines out of the abdomen again after they had been fairly fhaken into their places: May not the bowels have defcended upon you fo often from your preferring to make the opening in the ring rather a little too large? Would it not be as well (if from any fuch awkwardnefs the bowels were to fall down) that they were covered with their own fkin drawn gently together by two ftitches? Have you no defire to exclude the air? for you feem on other occafions to have a pneumato-phobia! yet we excufe your not talking about excluding the air, for the truth is, that when you cut up a hernia, or any other part, you can no more exclude the air than you can exclude the light. Though affuredly if any philofopher in Europe could exclude either, we fhould expect you to be able to do fo, who have given fo many rules about the exclufion of air! and about " obtaining day light in perfection ! !!"

[^14]
## MORE CONJEGTURES RELATING TO CONGENITAL HERNIA*.

Although among your conjectures, there are fome with which I am fully as much pleafed, there is none furprifes me more than this, about the thicknefs of the fac of a congenital hernia. You have laid down the principles which determine the thicknefs of a herniary fac, with fingular precifion. You have told us, that " the peritoneum has

* "In the treatment of ruptures of the congenital kind, Fittle difference oc" curs from the management of the bubonocele in its more ordinary form.
" When the parts can be replaced without any operation, it onght always " to be done, a trufs being at the fame time recommended as a preventative " of future defients; and when fymptoms of ftrangulation take place, which " cannot be otherwife removed than by the operation, it here becomes equally " neceffary as in any other fpecies of rupture.
" When from the circumftance of the parts having been protruded in " early infancy, and from their having at times continued to fall into the " fcrotum from that period downwards, there is reafon to fufpect that a ber: " nia to be operated upon is of the congenital kind, the furgeon in fuch a cafe, " in laying open the contents of the tumor, muft proceed with ftill more cau" tion than in cafes of ordinary rupture; for the tunica vaginalis which here " forms the fac, is commonly much thinner than the ufual fac of hernia. On " the parts being returned, more attention is neceffary too in dreffing the " wound than in other cafes of hernia; for the tefticle being here laid bare " by its vaginal coat being cut open, if it is not treated with much delicacy 4* it will very probably inflame, and may thereby be produgive of much diffefs.
"The teftis therefore ought to be immediately enveloped with its own proper " covering, the loofe tunica vaginalis; and at every dreffing, care fhould be
" taken to prevent as effectually as poffible every 4 ccess to the exiter-
" nal air."
the property, like many other parts of the body, of thickening," \&c. "That the herniary fac is at firt of no very confiderable fize." " That by repeated defcents, the fae continues to be pufhed lower and lower, till, in fome inftances, its bulk becomes very confiderable indeed." Let us examine, according to thofe principles, what fhould be the refult! fhould this fac of congenital hernia be thicker or thinner than that of other herniz? -Firft, It is named Congenita, becaufe it begins at birth, or foon after.-Secondly, It is unqueftionably the oldeft of all hernix, fince, as you tell us, "it had firft fallen down into the fcrotum in early infancy, and has continued to fall down into the fcrotum from this period downwards," i. e. during the life of the patient, who is now fuppofed to be of adult age. Here then is a hernia at leaft twenty, but perhaps fifty years old: At every defcent the fac has been enlarged and diftended! Every time the parts have been reduced, the fac has been bruifed and flightly inflamed ! and, by fucceffive inflammations, it has become thickened! Should not this fac then of the congenital hernia be the thickeft of all?

It is, moreover, a very unlucky conjecture, that this kind of hernia has not as proper an abdominal fac as any other. The congenital hernia is peculiar only in being in contact with the tefticle, not in having a peculiar fac. The original opening into the tunica vaginalis is not clofed when the congenital hernia firft defcends; the gut flips down into it ; but fill the proper tunica vaginalis is no bigger than merely to contain the tefticle! for when a gut comes into it, the tunica vaginalis is not enlarged by extenfion and thickening, but by more of the abdominal peritoneum be-
ing pufhed down from the abdomen. Each increafe in the hernia then brings down more of the peritoneum, and the congenital hernia has as true an abdominal fac as any other hernia ; the only difference is, the continuity of that fac with the tunica vaginalis: the tunica vaginalis forms indeed the lower part of the fac, but not the whole.

The fac, then, of the congenital hernia, is formed like every other, from the peritoneum forced down from within the abdomen; it is an old fac, thickened by frequent defcents ; it requires no peculiar operation, and leatt of all any caution on account of any peculiar thinnefs. All this you, much honoured Sir, might eafily have under, ftood! a mere Tyro might have put thefe facts fo together, as to have guessed right! If you have guessed wrong, perhaps it was from your thoughts being otherwife employed. You wanted to look exceedingly wife. Indeed I often obferve you practifing Puff's trick of fhaking your head ! but then, you forget, I fear, the beft part of the leffon-" Damn it, Sir, fhake your head as if there was fomething in it"

The text which 1 am now trying to illuftrate, concludes with a piece of humanity and a piece of learning equally worthy of your high abilities. Your humanity appears in your attention to the cold and naked condition of the tefticle, which muft, as you obferve, feel very uncomfortable when bared of its tunica vaginalis. Your learning is admirably difplayed in tranflating this Latin word tunica, which, you have now very plainly proved, means the coat of the testicle! the fcrotum is the great coat of the te!ticle; the tunica vaginalis its clofe coat; and the tunica albuginea its veft.-The tefticle being thus, equipped
with its feveral coats ! it is very natural to conclude, that when they are flit up, the tefticle muft be uncomfortable. It is very humane alfo to advife, " that the loofe tunica vaginalis thould be wrapped clofe round about the teflicle at each dref/ing, to prevent the accefs of the external air.

Here end the conjectures on the anatomy of the Herniary Sac.

## SECTION V.

Conjectures about the Femoral Hernia and Epigaftric Artery.

SIR,
I thought to have read your book through and through, and to have talked to yourfelf about it all the while, with perfect good humour. You have, indeed, fo entirely fucceeded in making the moft important fubjects ludicrous, that hitherto I have feldom wifhed to change my tone. But what fhall I now fay to a man, who, without the leaft tincture of anatomical learning, or the leaft degree of natural ingenuity, without even that knowledge which may be obtained from books, pretends to new-model the moft difficult operations in furgery !! There are certain fubjects, and this is one of them, where we fhould be ferious. The fmatterings of anatomy, or, rather, of anatomical names, which may be learned from books, can never be fafely applied to the pathology of fuch a difeafe as heroia. This piece of knavery you have been guilty of; and yet, cannot I for my foul be angry with you: for, behold, when I expect an interefting and ferious defcription of the relative
fituations of the hernia, fac, ligament, \&c. the firft thing that prefents itfelf is the femoral hernia playing at bo-peep with the femoral artery and vein. Firt, " The guts pafs immediately over the femoral artery and vein : Next, they are found on the outfide of thefe veffels:-But, in the third place-they are more frequently found in the infide of thofe veffels betwixt them and the os pubis *." Is it poffible to produce a piece of more confummate affectation, ignorance, and effrontery, than this is? Yet this is innocent nonfenfe, compared with what follows. What muft I fay next? to your obfervation (too often repeated not to be dangerous) " of the patient being faved from a great deal of hazard, when the contents of the tumour can be reduced without the neceffity of dividing the ligament $\dagger$ !!!" I no longer have a doubt, that the furgeon who writes thus incoherently about teguments, and liga-

[^15]ments, and hernias, and facs, and about compleating the operation without cutting the ligament, or dilating the ring!!! has been guilty of performing the operation of hernia in cafes where there was no true ftrangulation. Surely, Sir, it muft be eafier and fafer to pufh againft the inteftines while ftill covered with the fkin, facia, and fac, than after they are expofed by an incifion the whole length of the tumour? Allow me, Sir, to remind you of fome things concerning which (were I in your fituation), I fhould catechife myfelf after the following manner.

If there be no ftricture upon the hernia, why fhould I operate?-If there be ftricture, and I do operate, for what purpofe are all my incifions but to let me get at this ftricture? -When I have cut open the parts, how fhall I dare to pufh and force the naked bowels before the ftricture be relieved?-If I in general order the young furgeon " to make his cut in the ring or ligament rather somewhat too large," how fhall I dare to reverfe the rule, or direct him to pufh up the bowels without relieving the ftricture? The inconfiftency of ordering him to cut open the hernia where there is no ftricture, or to force the bowels before cutting that ftricture, will fhock even the ignorant!!!! Have I performed many operations in which I found myfelf able to reduce the hernia without dividing the ring or ligament? Yes.-Have I judged well in operating in fuch cafes? No.-Is it not probable that I had failed to keep my patient long enough on the crown of his head? Yes.Is it fair, is it judicious, to hurry operations, to operate in
" and epigafric artery with refpect to this ligament, any cut made into the " fubfance of the latter, runs the greateft rifk of dividing one or other of "thefe."
hernia, for example, when the fymptoms of ftricture have lafted but a few hours? No.-Should I not confider long a point fo difficult as this of operating fuddenly !-of operating within a few hours !-of operating where it is poffible to reduce the rupture without cutting the ring!! Should I not very maturely weigh all this before venturing to give the fruirs of my experience to the public? Yes.-Is it fair, right, honeft, or laudable, to propofe a rule fo ambiguous in itfelf, fo unprecedented in the practice of other furgeons; to boys! to mere boys ! to print it, not in a differtation ! but-in a fyftem, containing profeffedly the elements of furgery; and containing, by implication, no rule but what is abfolutely and perfectly fafe ?-No-no-no.

Thefe you will allege, Sir, are fevere categories. I know your apology for thefe operations too well ; it is in every book ; it is the old epigaftric artery, is it not, whofe hiftory we know fo well? The alarm about this crooked epigaftric artery was raifed two hundred years ago; it fpread like democracy, and is not yet allayed. Anatomifts and clofet fpeculators, who were not furgeons, were alarmed; furgeons, who were no anatomifts, were infecled with the panic; one old goofe took wing, and all the flock have flown after him in a direct line.-This conjecture about the epigaftric artery was too much in your own favourite manner of conjecturing not to be affimilated into your book, and conjecturally improved to the utmoft of your power. Others would have proceeded to prove, firft the danger of wounding an artery, and then the difficulty of tying it; but you, by a fort of retrograde logic, in which you are peculiarly
happy, begin your argument where others would end. " But the difficulty (you obferve) of tying the epigaftric artery with a needle and ligature is such as muft convince every one who has tried it that Mr. Sharp had never put it in practice *."

This, which has all the appearance of a candid appeal to furgeons on a matter of common experience, is quite the reverfe. Have furgeons actually tried to tie the epigaftric artery? Yes. And pray then how can you make them conclude that Mr. Sharp had " never put in practice" what they themfelves had tried, i.e. "had put in practice?" If, on the contrary, furgeons have had no opportunity of trying it ! how can you make them judges of difficulties which they have never encountered? You know full well that you might with as much reafon appeal to bricklayers as to furgeons on this point. Have you, Mr. Benjamin

* "The Jpermatic veffels, as they go along to pafs out at the opening in " the external oblique mufcle, run nearly upon the very edge or border of " Poupart's ligament almoft througb its whole length, fo that $I$ confider it " as impofible to make a free divifion of the ligament without cutting them "acrofs.
" Even in emaciated people, however, it is a matter of much difficulty " to reach the epigaftric artery, and in corpulent patients it will be found " altogether impoffible to furround it with a ligature; fo that beginners " ought to be very cautious in receiving the directions ufually given on " this fubject. On reading the remarks of the late Mr. Sharp upon this " point $\dagger$, to fecure the epigaffric artery by means of a ligature, one would ex" pect to be the eafieft of all operations; but the difficulty which in reality " attends it, is fuch, as muft convince every one who bas tried it, that Mr. "Sharp himfelf had never put it in praAice."

[^16]Bell, ever feen the epigaftric artery cut? Has any furgeon in Europe cut the epigaftric artery, or feen it cut? Have you ever tied it, or tried to tie it, or feen others try to tie it? Has any furgeon in Europe told a tale of its being cut! except Gargeneot, the father of lies?

Thefe things you might have confidered; and had you obferved, that of all the bungling furgeons who have for thefe two centuries been operating for femoral hernia, not one has cut this artery ! had you obferved this fingular fact, and reafoned upon it; you might have come near to a a guefs, which would have redeemed all your unlucky conjectures. But when the alarm was abroad, efpecially about any thing curious in anatomy, you could not be quiet. You have been at pains to prove that you are as much aware of this danger as others, and as good at inventing operations by which it may be fhunned as any of your neighbours. You have told us, "that a confiderable time ago, it occurred to you, that in this part of the operation, fome affiftance might be derived from performing it in the following manner:"
" The firft fcratch with the fcalpel was very flight; but " by repeated touches, it was made to penetrate almoft " through the whole thicknefs of the ligament, till at laft " a very thin lamella only of ir remained! The finger be" ing now withdrawn, the protruded parts were returned " with great eafe! the ligament at its weakened part ji:ld" ing gradually as the neceffary preffure was applied for " the reduction of the inteftines.
" As inthis manner the opening may be enlarged to anyne"ceffary extent, and as the spermatic vessels and epigastric
"artery are thus effectually avoided, the operation for this " fpecies of hernia may not only be done with equal cer" tainty, but with the fame degree of Safety, as for any other " kind of rupture! For, by not penetrating with the fcal" pel through the whole thicknefs of the ligarnent under " which thefe blood-velfels lie, they are thereby kept free from " all kind of danger during this part of the operation; and, " the preffure to be afterwards ufed for the reduction of " the protruded parts, if done in an eafy gradual manner, " as it ougbt ahways to be! can never injure them materially! " as blood-veffels of the fize and ftrength of whicb thefe are!!!! " eafily admit of a degree of extenfion much more confider" able than can be bere required."

What is this? In what does it differ from the operation which every furgeon performs? In this operation you piddled very flowly and timoroufly at the ligamentmyou cut it through at laft !-You were juft as much aftonifhed to find yourfelf performing the operation for femoral hernia ! as if you had found yourfelf writing verfes,-or playing on the harp,-or refufing a fee. You had imagined terrible things concerning this epigaftric artery, and were aftonifhed to find yourfelf cutting-cutting-God knows how : but without finding this terrible epigastric!I need not remind you how many operations have been invented for efcaping this imaginary danger; you have yourfelf mentioned Mr. Arnaud's method of dilating the ring ; you fhould next have told us (if you had known it) of Mr، Le Blanc's famous invention of a dilator or gorget for tearing the ring! but you have made us full amends, by telling us about your own operation of cutting flowly AN INCH : in-
to the substange of a ligament which has no substance (or thicknefs) and not half an inch of breadth. One thing you have not told us, viz. what the Spanifh furgeon fays on this fubject! though this fame Don Antonio de Gimbernat, Phyfician to the King of Spain, has publifhed a book upon this femoral hernia and epigaftric artery ; and your conftant and critical friend, Dr. Beddoes, has tranflated it for (your inftruction I had almoft faid) your correction, I mean! You have refolved to be inftructed by no books but your own; you are your own conductor*!!! Let us fee, then, what a phyfician on the other fide of the Bay of Bifcay will fay to Mr. Benjamin Bell of the Royal College of Surgeons.-We may read it fafely, " our withers are unwrung."
"This author (Mr. Benjamin Bell) was perfectly well " acquainted with the danger of dividing the Fallopian " ligament in any direction whatever! and with the diffi" culty of dilatation without incifion. He was not, bow" ever, well acquainted with the duplicature of the crural " arch! or with its attachment along the creft of the os " pubis! neither had be any exact acquaintance witb the " foramen! which gives paffage to the parts forming the " crural hernia;-confequently-he could ill underffand " what part forms the firangillation. Had he known it! he " would not bave meddled with the Fallopian ligament ! not " even with its edge, as he did, doubtlefs fuppofing, that this " ligament forms the frangulation."
In fhort, all the furgeons of Europe, as well as yourfelf,

[^17]have quarrelled about the way of efcaping this imaginary danger; you have all been employed for many years in frightening one another, like boys in the dark; but I have news for you, Mr. Benjamin, for Don Antonio, Mr. le Blanc, and hundreds of others, who have lived in perpetual fear and difquietude.

Hear, ye Surgeons of Europe, Anatomitts, Difcoverers, Inventors, Rupture Doctors, of whatever calling or de-fcription!-Awake from your flumbers! roufe ye from unquiet dreams!-Peace be among you benceforward! for ye fhall cut up the ligament of the thigh without let, ftay, hinderance, or interruption of any kind.-The epigaftric artery is annihilated by the ftaff of Mofes; and the devourer of all good things ! and the fcapular artery hath drunk up its blood !-Has it not been declared by Jonathan Bell furgeon, that all the world is miftaken except himfelf? what know ye about fafcias, or aneurifms, or hernias, or epigaftric arteries? Sit ye down, lay your fingers on your lips, hear and perpend !!! The epigaftric artery never was cut-never will be cut-never can be cut. Various are the furgeons, good and bad ! in country and in town! who have fought for the fame, with their fingers fome! and fome with their knives! yet hath it not been found: It lieth at the back of almoft every rupture, both of the groin and of the thigh, nor ever hath it been found playing bo-peep with the hernia!-as moft notorioufly the femoral artery hath been detected fo amufing itfelf! to the great terror of all beholders, and indefcribable danger of the King's lieges ! ! !

K ij

Thefe blazons were made in certain public Johnbellations; the ingenious lecturer being all the while employed in drawing the various zig-zags of this felonious artery, moft delectably, upon the living body. Thefe truths I learnt from a faithful apprentice of mine, who in fpite of my wholefome counfels did perfift in hearing the faid Jonathan, and whom I examined every evening touching his fkill in furgery. Caufa foientic patet.

But now we fhall fee an end of this devourer of all good things. His drawing of arteries, \&c. on the living body, is merely a bafe imitation of the "corpus multis modis vulneratum" of Vefalius, who hath drawn his picture of the wounded man with darts and arrows fticking in every limb of him,-hammers knocking at his occiput,-and bullets with wings flying about him in all directions :-But thefe hints of Vefalius are to be improved to the higheft poffible perfection ! the man is, in the next year's public Johnbellations, to be shot buick in the jugulars, for the illuftration of gun/bot wounds ! !!

The witnesses will be innumerable!-The butchers will be empannelled on the jury!-Phlegm will fit in judgment!-Necrosis, with bowels of compaffion, will be our Chancellor, and prefent the record!!! and I, Jonathan Dawplucker, Efq. will be Clerk of the Affize.-The City Chamberlain, will officiate as youngeft Bailie,-and in the evening will be illuminations in the College Hall.

Vivant Rex et Regina !
" Rejoice ye happy Gothamites, rejoice;
" Lift up your voice on high, a mighty voice !"

## ON THE HYDROCELE,

## AND OTHER DISEASES OF THE TESTICLES.

## OF THE USE OF PREFACES IN SURGERY.

Qui autem omnia metiuntur emolumentis et commodis, neque ea volunt praponderari honeftate, hi folent in deliberando honeftum cum eo quod utile putant, comparare.-Sape enim tempore fit, ut quod plerumque turpe haberi foleat, inveniatur non effe turpe.

Honoured Sir,

I have hitherto (in paffing over your prefaces) neglected one of the chief duties of a critic and commentator, whofe care fhould be, to exhibit his original in the moft engaging point of view. Prefaces and dedications are ufually written with a degree of firit and enthufiafm, and yours are compofed with peculiar elegance and delicacy.-They have always fome interefting relation to yourfelf, and to others; they are kindly ftuck up upon the top of your book,-as finger pofts at crofs roads, to warn thofe who may be in danger of lofing their way$\sigma$ This is the way to - In fhort, one no fooner enters your gate than the eye is arrefted by an advertifement, fo contrived, as to ferve at once a variety of ufeful purpofes. This is a fpecies of compofition in
which your two books on hydrocele and furgery are both peculiarly rich: In the following paragraphs, you have imparted fome things to the public, which I hope will not be overlooked by thofe whom they may concern.
" With a view to illuftrate this work, and to give me " an opportunity of adverting more particularly than can " be done in a general fyftem to many of the more im" portant parts of furgery, I have for many years paft been " occafionally employed in arranging for the prefs narra" tions of such accidents and difeafes, in the management of " which I have been perfonally concerned, as I conceive " will anfwer this purpose; and they will be judged to be " the more valuable, as a great proportion of all that I " fhall felect will relate to circumftances in which I have " had occafion to act on confultation with other practition" ers." You alfo have the goodnefs to explain to us, that " when the fubject under confideration can be render" ed more clear and intelligible occafionally, you will em" ploy fuch reafonings as experience and common fenfe " feem evidently to fupport;" and you will be careful" you have told us (in the way of Circumbendibus, a figure of rhetoric which you feem to delight in) " you will be care" ful to fate nothing but fact," fo Mercury at your moft need help you.

You inform us next, that " at fome future period you " or your fon, now engaged in the fame profeffion with " yourfelf, may give an abridgment of the whole work, " which may ferve as a manual or directory for thofe occupied " in the line of chirurgical operations; but the concife "defcription of an abridged work would be ill calculated for
" thofe who have feen notbing, and therefore-! therefore, " have all to learn." We are very fenfible that it would be a great degradation to fet your fon to write to tbofe who have feen notbing, and confequently who have every thing to learn; and that his talents lie in a higher line, he ought furely to compofe for none but thofe who are occupied in the line of chirurgical operations; all which, though we do moft firmly and potently believe, yet do we not think it meet to have it thus fet down; for though there are infinite advantages in an oblique puff, the puff direct ! implies an awkwardnefs in thofe who are obliged to ufe it; and a kind of neceflity in the cafe, which it is dangerous to acknowledge, which is fometimes fatal even to truth. In the prefent inflance, for example, your anxiety on this fcore is enough to hurt the literary reputation of your fon, which, but for fome mifadventure of this kind, never could have been called in queftion. Confider, Sir, that while he is oiling his eyes ${ }^{*}$, or while you ftand amidft your friends fweating for his recitation $\dagger$ of this precious leffon, the whifper may go round even in your own chofen circle, "Quis expedivit pfittaco fuum-XAIPE-XAIPE."

In the Preface to this book on Hydrocele, you mention fome things which are of infinite importance to the public, as well as to your fon and yourfelf: You have told us, that this book is written in fome degree to prevent the

[^18]public being deceived by a fet of impoftors in furgery, who have learned a piece of legerdemain, from which you have an utter averfion (as you have, indeed, from every thing that is mean or cunning), viz. the tapping the fcrotum with a lancet,-fquirting in a little red wine, and perfuading the credulous that they are cured of a difeafe which is incurable, except " by an incifion as big as the part will allow !-crammed with fcraped lint as deep as it can go!"-You in mere charity take upon you to inform the lieges of their danger; tell them " about fome late attempts to bring forward again the ufe of injections for the cure of the hydrocele in this country;" and you finally eafe your heavy confcience, by declaring, for the peace of their fouls, and health of their bodies, that thofe who have had the fcrotum cut up according to the true principles of fyftematic furgery, have all thriven remarkably ! that you have cut up 365 (exactly a year's labour) with your own hand, who, notwith/fanding, have all done well; but that " all thofe who have been cured with wine injections are fo imperfectly cured, that they will certainly have a return of their complaint at leaft in three years!!!"-And fo they would, Sir!-if you were a conjurer, which certainly you are not;-or if you could buy knots of wind from Lap. landifh pawawers to fill people's tunica vaginalis with. You have, in the mean while, given thofe unlucky gentlemen a mark to know you by :-they will hardly take a glafs of wine without muttering wifhes for your welfare: and having accuftomed many of them to think about you with no fmall anxiety for three years! I dare fay, you have enfured their gratitude for life.

Which of all thefe paffages is the beft compofed, is not for a mere critic to decide: Your partners will better underftand where you have compofed fkilfully; the effect produced being the trueft teft of the excellency of this kind of compofition. You have told us, that the hydrocele caninot be cured by injection! that all thofe who have been fo cured by other furgeons will have a return of this diforder in three years! that you have cut $165^{*}$; and drefled them with oiled cadefs!!! and not one of them has died! that you are going to publifh a great book of obfervations and confultations ! that your fon has entered into practice along with you ! and that, like his father, he is not a mere furgeon, but is (or at leaft is to be) an author.-If the public will not underftand this!-prefaces will foon be out of fafhion, and one might as well pare corns, and advertife in the newfpapers, as cut hydroceles, and write books.

This book, we underftand, was once but a chapter of your firft volume ; but there was too much valuable metal in it to leave it in that quarry of unblafted ore. You have a facility in turning and twifting, welding together, and feparating again, your ftuff; fuch as we have never obferved in any other manufactory. Thofe who have remarked the various tranfmutations of your firft volume on Ulcers, and of this your book on the Hydrocele, and of your book on the Venereal Difeafe, will acknowledge you to be a cunning workman,-at leaft, in your own peculiar metal.

[^19]Your books are made of malleable ftuff! you take out a lump, give it a few turns upon the anvil, and a few thumps of the hammer ; and behold, it comes out quite a new article of trade.

## SECTION I.

## Of the Anatomy of the Teflicle.

O $\mu$ tinam nova incude diffigas *.

When the celebrated Captain Cook was circumnavigating the antarctic regions, he often obferved an obfcene bird chafing the others for their offals. By fcreaming and flapping around them with its wings, it fo alarmed them as to make them drop their tribute, which he darted after with fuch hungry expedition, as to catch always before it fell intc the fea. You will obferve, gentle reader, how Benjamin fails and floats heavily along, while I go fereaming and whirling around him like one of thofe foul feeding birds, dodging the albatrofs, through the oceans of mift and fnow.

Before we begin, I ftop one moment to give you a piece of advice:-Lofe not one word of this precious text-read gently! read flowly! Difcoveries are here heaped thick upon one another, and the anatomy of the tefticle is fo defcribed, that it will be worth your while to get this leffon by heart! recite it to your friends at leifure hours !

[^20]do not, I befeech you, do not grudge to communicate that amufement to others. which I communicate fo freely, and have been at fo much pains to procure.
" As the difeafes we are now to confider are chiefly feat" ed in tbe coverings of the teftis, I have given a more par" ticular defoription of тнеm, than is neceffary in fpeaking " of the teftis itfelf; with refpect to which, I fhall only ob" ferve, that it is evidently very vafcular, being compofed " almoft entirely ! of different convolutions of blood-vef" fels!!!"

Gentle reader, this is the defcription of the tefticle;this is the whole!-Short but valuable-A precious jewel in a fmall cafket !

The tefticle is a gland whofe colour is peculiarly white; its coats thick and ftrong; its blood-veffels few in number -fingularly few! its arteries are long and ftraight, both as they defcend towards the tefticle, and where they fpread upon its membranes; the veins appear convoluted and numerous only in difeafe : the whole gland is fo white, that the ancients afcribed no red veffels to it, and they called its white and bloodlefs fubftance by an appropriate name. But the chief peculiarity of the tefticle is the feminal tubes, which are colourlefs, and convolved in a very furprifing manner. This author had heard of the Tubuli Teftis, but could not defcribe them: he remembered fomething about convoluted veffels; (and what can convoluted veffels mean, thinks he, but convoluted arteries and veins?) He applies the defcription of thefe Tubes of the Tefticles to its blood-veffels. His recollections of anatomy
are not much unlike Madam Malaprop's recollections of Shakefpeare.

Indeed, Mr. Bell, I know of nothing equal to your defcription of the tefticles, except the following defcription of certain ornaments, called the Female Breafts:-" The " sitcation and appearance of the breafts are fo obvi" ous, that they require no defcription!"-" The breafts " are of a glandular ftructure, fupplied with many lym" phatics, blood-vefiels, and cellular fubftance. In the " unimpregnated flate, they may be faid to be ufefill! only " as ORNAMENTS!!! But at the end of pregnancy " they furnifb milk for the nourifhment of the child ! !!"

For a moment I fufpected that you had been fo obliging as to compofe this defcription for a certain illuftrious au-thor-to be userul merely as an ornament!!! But when I mention his name, every one will be fenfible, that this, and all the other ornaments! advertiferrents! prefaces! and enunciations of his fon! are made by himfelf. Who does not know Dr. $\qquad$ and Dr. $\qquad$ 's fon; for Dr. $\qquad$ allo has a fon, of whom he feems alfo fomewhat proud-and with good reafon, as you will perceive by the following extract from that delicate, elegant, witty, and judicious book, which ladies are taught to read; a book defigned (as once on a time good books were), " for the clofet," "for the ufe of families."-Dr.__fays, in his preface, that he " was thunderftruck with the difficulties " which prefented themfelves to him, when he firft perceiv"ed the neceflity of altering the ftyle and form of his " book. The importance of the object, however, rendered
" him infenfible to the difficulty of the undertaking! and " the aid which he derived from an affiftant! who has de" voted himfelf to the fame line of profeffion-his own fon! "-encouraged him to proceed with the tafk *!"

* "O Jephtha, judge of Ifrael, what a treafure !"-Whoever defires to know more of the Dr. $\longrightarrow$, father and fon, muft be at fome pains to feek for a pamphlet, written with fingular fpirit and addrefs, by Dr. Gregory, Profeffor of the Practice of Phyfic. It difappeared very fuddenly, for it had enough of fpunk to run off fairly upon its own legs; but the Guide to Students, "lucus a non lucendo," was really worthy of the celebrated profeffors to whom it was afcribed; it again was carried off in the lids of band-boxes and travelling trunks, " cedro digna locutus." All that remains of it (for very little of it remains, thanks to the Scombri et quicquid-ineptis amicitur chartis), is now travelling round the world in this fafhion. But there are other ingenious works brought forth daily to replace thefe occafional loffes, and, among others, " a family book," a vade mecum for pregnant ladies, and for young ladies; where, though the main body of the work is by the elder profeflor of midwifery, the ornaments! are certainly by the junior profeffor, and are in the very fineft Arabefque ftyle. For example, he declares, in his Preface, that "the ftyle of the following fheets is fimple. Elegance and meannefs of " language would have been equally inadequate to the fubject."-" Tech" nical terms are only fubftituted for Englifh expreffions, which are " thought to found harfhly to delicate ears." Then the young affiftant comes to his delicate ornaments in the fimple ftyle. "Although the ex" ternal form of women, except in certain refpects, appears nearly the " fame with that of men, yet there are fome general circumftances in " which they differ materially."-" The lower part of the belly of " women is different from the fame part in men,"-" and the facred bone " is broader and more hollow, and the rump bone is very moveable, and " can be pufhed back." Whether there is more of fimplicity or of delilicacy in thefe paffages, we are at a lofs to decide; but the fimplicity of the following paffage is quite obvious: " Being called by a very judi" cious medical practitioner to vifit a lady whofe cafe feemed very uncom* mon! fie had been, I learaed, for three days in very ftrong labour,

But the defcription of defcriptions is that which follows, -of the Scrotum, and the Septum;-and the Rapha, and the Dartos;-and the cellular fubftance, and the ligamentous fubfance;-and the inflations with air,-and the injections with water;-and all the other curiofities, anatomies, anomalies, and analogies,-which ferve to explain anafarcas, and hydroceles, and double hydroceles, and hydato-hydroceles :-It is incomparable ! incomparable !Gentle reader! read gently! Learn alfo to recite thefe defcriptions.
" Besides the vaginal coat proper to each tefticle, the " two teftes have for their fartber! protection, a more external " covering, the fcrotum ! a bag! formed almoft ! entirely
" but the child could not be delivered in confequence of there being no " outkt for it ! ! !"

The thing, we know, is neither curious nor rare,
But wonder how the devil it got there!
The celebrated affiftant profeffor is not infenfible to the wit of this paffage ; for he marks the three laft words, as I do, in Italics, Vid. page 107; in page 99. we are told how many young ladies are loft by confumptions for want of accoucheurs ; in page 122. we have directions how to frighten an old woman, or a woman beginning to grow old! out of her wits. The whole book is one uninterrupted advertifement of "a skilful and able practitioner;" and if this book did not carry the facred title of a "family book," not to be profaned by unhallowed hands, I fhould recommend it to young men as an excellent fubftitute for Lewis's Monk. Thus you may perceive, Mr. Bell, that no one is fo perfectly qualified to abridge or adorn a father's book in the true fpirit of the original as a fon. You may encourage the abridger of your works by an honourable precedent.
" Vis frater ab iftis
Ilibus?
Vos eftis fratres."
" of ikin and cellular fubftance; for that body ! the dartos, " which has been commonly defcribed as mufcular, is now " clearly proved to be altogetber cellular !! Even the septum " scroti, or that membrane which divides one tefticle / from " another! is compofed of cellular fubftance in a more " condenfed ftate. By air IT is eqfily inflated, and IT is alfo " pervious to water; fo, of courfel it partakes of all thofe " watery effufions, to which the more external parts of the " fcrotum are liable!!!
"This ftructure of the fcrotum! it is neceffary to be ac-
" quainted with, as, from the defcriptions which, till of late!
" have been given of it, young praclitioners! are induced to
" confider it as mufcular!!! and to fuppofe the feptum,
" with its rapba, to be ligamentous !!! and hence they are
" led to be more cautious than they need be in performing
" operations upon it!!!!
" Having tbus premifed an account of the anatomy of the " parts in which the water in bydrocele is collecled, I fhall " now proceed to confider the different varieties of the " difeafe!!!"

If you feel any difficulty, gentle reader, in applying thofe anatomical defcriptions to the difeafes which you have hitherto read of in other books, do not fuffer yourfelf for that caufe to be caft down; for the author who is thus capable of abridging the anatomy for you, is not lefs capable of reducing the difeafes of thofe parts to a correfponding fimplicity. Learn, gentle reader, that hydrocele is only of two kinds! the encyfted and anafarcous! That the tefticle is in its body and fubftance as liable to anafarca as the fcrotum is ! That the fpermatic cord is as liable as either!!!
" All the varieties of hydrocele which have been men" tioned by authors, may, I think, be comprebended under " the two following, the anafarcous and encyfed!!
" In the former, the ferum is diffufed over all the fub" ftance of the part in which it is feated; it is not collect" ed in any particular cavity, but occupies equally all the " cells of the part : In that which I term encyfted, the " water is collected in one diftinct bag, and a fluctuation of " a fluid is, in general, perceived in ir ! ! The fcrotum, " with its contents! the tefticle and its appendages! and " the fpermatic cord, with its coverings! are liable to both " varieties of the difeafe."

Mr. Benjamin Bell, your head is furely (as our profeffor of chemiftry would fay) " a metaliferous mountain *," and we are now driving a fhaft ftraight onwards along one of the richeft veins!!! You have difcovered by conjecture many very curious things in furgery! but fuch a conjecture as you have made here !!! It will make your fon himfelf -when he comes to abridge it-hold up his hands !
" As foon as water has collected in any confiderable " quantity in the fcrotum, a foft, inelaftic, colourlefs, tu" mour, is obferved over the whole of it. The tumour at " length becomes large; and although originally confined " to the fcrotum, it at laft fpreads up the groin! The pe" nis likewife becomes affected, and often fo fwelled and " diftorted, as to excite much inconvenience and diftrefs; " and although the fcrotum is compofed of parts which " readily admit of dilatation, yet, in fome inftances, the " tumour becomes fo enormous, as to burf from one end to " the other.! !"

Was the like of this ever heard of? If you, Mr. Benja-* $\min$ Bell, will undertake, either by any of the cafes in your two new volumes (which by the by we are all wearying for), or from any of the thoufand books which you have read, or by the help of Gargeneot, or by the report of any honeft refpectable well-meaning furgeon! to prove! that any tumour, great or fmall, Abfcefs, Hernia, Hydrocele, Buboe, Aneurifm, or Anafarca: Wen or whittle; melicerous or cancerous; -of the bladder, of the ftomach, of the inteftines, or even of the womb itfelf (though torn in the violence of labour), has burf from one end to the other !!! I will hold out my right arm, and let you bleed me in " the vein that lies moft under the fafcia," as often as you pleafe.
" With refpect to the hydrocele of the dartos! a difeafe " particularly defcribed by ancient writers, as that part of " the fcrotum is now known to be entirely cellular, so any " water collected in it muft tend to form that very difeafe " we have juft been defcribing, an anafarcous fwelling of " the whole fcrotum!!!"

On this fubject, gentle reader, we will not difpute with Mr. Bell for very obvious reafons.
" The Jymptoms induced by hydrocele are thefe! A foft " colourless tumour is at firft perceived at the inferior " point of the tefticle! it is cbiefly remarkable when the pa" tient is erect!!"

This fymptom of hydrocele, viz. a colourlefs tumour, is feldom awanting, and the progrefs of the fymptom is critically and elegantly defcribed, in the following paragraph.
"For a confiderable time, it does not extend farther " than the ufual boundaries of the fcrotum ; but, on longer " continuance, it advances to the abdominal mufcles! In the " early ftages of the difeafe, when the contents of the tu" mour are difcoloured! and when the vaginal coat has not " yet acquired much thicknefs ! the fluid contained in it, " on being expofed to this trial, ufually appears tranfpa" rent; and, in meeting with $i t$, we neceffarily confider it " as a coroborating proof of the exiftence of ferum."

Gentle reader, you will perhaps agree with me, that in this paragraph the author, by discoloured, means colourlefs; and that by meeting with it!! he means meeting with the flame of the candle! through the fcrotum, \&c.
" The abfence, bozvever, of this! is not a proof of the con" trary; for, as the tranfparency of the tumour depends " entirely on the nature of its contents, and on the thick" nefs of its coverings, whatever tends to render the one " lefs clear, and the other of a more firm texture, muft, in " proportion to this effect, invalidate the certainty of the " tefl!!!"

Here the author proves very clearly, that whatever makes fkin thick, or phlegm muddy, has a wonderful effect in preventing our feeing through the faid fkin and phlegm!
" Thefe are the ufual appearances of a hydrocele, where " the difeafe is confined to one fide of the fcrotum. In " fome inftances, however, we meet with a double bydro" cele, when the difeafe occupies the cavities of both tuni-
" cæ vaginales! and in which the tumour, inftead of being " confined to one fide! of the fcrotum, occupies the whole " of it equally ! ! !"

If I had not fallen upon this invention of cutting $u p$ the paragraphs, difcoveries muft have crowded fo upon me, that __ " would heart of man once think it-there's ne'er a double hydrocele, be it, of what fize it will! but it occupies both fides!"
" In the hydrocele of the tunica vaginalis, the tumour " begins at the bottom of the fcrotum, and proceeds flow" ly upwards. In two cafes, I have met with the tefticle " on the anterior part of the bydrocele; and, in a third, al. " though fixed behind in its ufual fituation, it alfo adhered " at one point to the middle and anterior part of the tu" nica vaginalis! !"

This is juft the fame trick that its coufin-german the hernia plays when it gets "fometimes before the femoral artery, fometimes on the infide of the femoral artery, fometimes on the outfide of it, although even that is nothing equal to this cunning of the tefticle getting to the fore part of the hydrocele! It may now be added to the diagnofis as a marked peculiarity of hydrocele, that it is more cunning than hernia *.

[^21]The hydrocele, gentle reader, is a difeafe which never was nor ever will be cured by outward applications; yet Mr. Benjamin Bell, willing to have it underfood that there is nothing which he does not know, nothing poffible which he could not do, has chofen to favour us with what are ufually called his fentiments on this fubject.
" I have employed a variety of ftimulants and aftrin" gents, fuch as a volatile liniment, prepared with fix parts " of oil, one of camphor, and one of fpirit of harthorn; " tincture of cantharides; the fteams of vinegar ; poulti" ces of vinegar and crumb of bread; and compreffes of " linen, foaked in brandy; and the practice being neither " attended with difficulty or hazard! I mean to continue it " till farther experience fhows, whether it fhould be retain" ed or not! That it will often prove fuccefsful in remov" ing a hydrocele, by promoting the abforption of the " fluid contained in the tunica vaginalis, is fcarcely to be " expected; but we may reafonably fuppofe, that ftimulat" ing applications, capable of exciting inflammation in the " tefles, may accomplifh a cure, after the water has been " drawn off with a trocar."

Here is a conjecture, a curious and nice one; there is no doubt but that the author, even while he was writing this book, might have converted his conjecture into an experiment ; it was perhaps, however, wifer to leave it as a conjecture ; here it ftands, an eternal monument of the ingenuity and deep thinking of the author:

This volume, gentle reader, was felected from among the works of the author, and was reprinted by itfelf, for
purpofes which the preface explains, but chiefly on account of two "improvements which the author now fuggefts in the treatment of hydrocele by the fimple incifion :" -" He conceives them to be important, and that they render the operation eafy, certain, and fafe;" and foul befal the man who tries to conceal fuch improvements from the world.

## IMPROVEMENT I.

" After finifhing the operation on one fide, an opening " is made into the vaginal coat of the oppofite tefticle, at " the upper extremity! tbrough the feptum fcroti! and the " incifion being carried down to the bottom of the tumour, " the cyft is thus equally well laid open, the water is as " completely evacuated, and the difeafe is not more liable " to return, than by doing the operation, in the ufual man" ner, and at different times."

## IMPROVEMENT II.

" Having frequently found, that the dry lint inferted in" to the tunica vaginalis, adbered, at the firt dreffing of " the parts, fo firmly to the furface of the teftis, that it " could not be withdrawn, I at laft began to conclude !! " that this might render the inflammation more fevere " than it otberwife would be; and it foon appeared that my " conjecture was well founded!!!' For feveral years paft, I
" have covered the pledgits applied to the furface of the " teftis, as bas been advifed above, either with fine oil, or " with a thin liniment of oil and wax, which anfwers bet" ter!!! This gives much lefs pain, in the firft inftance, " than dry lint, and the pledgits never adhere to the conti". guous parts; fo that they can be as easily removed at " the firft drefing of the fore, as at any future period of the " cure!!!
" The effect of this, and of proceeding in the other parts " of the treatment, in the manner I have mentioned, has " been, that, during all this period, the inflammation has " never gone farther than I could have wifhed it to do; " never fo far as to excite the leaft caufe of anxiety."

## IMPROVEMENT III.

" From want of attention, I have known the tefticle " entirely extruded from the fcrotum, and, in one inftance, " from fufficient pains not being taken to replace it, the " cure was completed with the teftis in this fituation; when, " inftead of being covered with the vaginal coat and fcro" tum, it was covered with fcarf fkin only.
" The beft metbod of preventing fuch a misfortune, is, " to draw the edges of the divided tunica vaginalis and " fcrotum nearly together, after the teftis has been proper" ly placed, and the pledgits of oiled linen inferted; and, " in this fituation, to fecure them, either with a couple of fu-
" tures !/! at proper diftances from each other, or with flips " of plafter, fufficiently adbefive for retaining then."

There is nothing neceffary to make this paragraph perfectly elegant, but that Winifred Jenkins fhould have had the fpelling of it: " A kipple of em" was a favourite expreffion of hers alfo.

Having praifed and defrribed this bloody operation, he next defrribes the confequences of it ${ }^{*}$.

* " In moft cafes, the inflammation of the tefticle does not rije higber " than it does in the fimple bernia bumoralis from gonorrheea; and it gra"dually fubfides as the fuppuration advances. The abatement of the in" flammation is alfo a/jifed by continuing a cool diet, the occafional ufe of " opiates, and keeping the belly open.
" I have, in various inftances, feen, when the dreffings have not been " removed for fix or feven days, and in fome cafes even in lefs, that the " whole contiguous parts have been efcoriated by the acrimony of the " matter alone, and by which more uneafinefs has been induced during the " courfe of the cure, than by any circumftance connected with the opera" tion: Nay, in fome, the inflammation induced in this manner has an ob" vious influence on that of the tefticle, and tends to render it much more " fevere than it otherwife would be.
" On fome occafions, at the firft dreffing, and always at the fecond or " third, the pledgits inferted between the tunica vaginalis and tefticle " come away; and, whenever this happens, they /hould be renewed. It is " alfo proper to renew them daily, for the firft fourteen or fiflecn days after " the operation; not, bowever, of the fame depib as at the firf, as, during " the latter part of the cure, it proves fufficient, if they are merely inferted " fo far as to prevent the divided edges of the tunica vaginalis from adher" ing to the tefticle before the adhefive procefs has taken place in the parts " more deeply feated. To this point, I muft obferve, the moft particu-
" lar attention is neceflary; for, when this mode of operating fails, that is, " when the difeaf: returns, it is, almoft in every inftance, from this precau" tion being overlooked. In my own prasice, the difeafe has not returned " in a fingle inftance; but I have met with different cafes in which it has " done $f$ o, and in all from the caufe I have mentioned, viz. the divided

The language in which thefe wonderful improvements are explained to us, is fuch as we are always to expect from Mr . Benjamin Bell. But the rudenefs of this operation, the harfhnefs of thefe dreffings, nay (as he fays), " nay even the interpofition of lint covered with oil," "inferted deep into the wound," " AND pledgits of ointment covering the large fore," " AND rendering removal eafy," "AND relieving the diftrefsful uneafinefs !! !"-all this founds to a modern furgeon much like the tranflation of fome old book of fargery, where ignorance, harfhnefs, and boldnefs, and quackery, in the affairs of difeafes of the private parts, go hand in hand. How much will modern furgeons be aftonifhed upon being informed, that they have been driven into a variety of very foolifh experiments, merely from an ignorance, highly culpable, of this great improvement of a piece of oiled lint.
" Others ! ! from not being fo fortunate ! and with whom " a high degree of inflammation was often induced, not " conceiving that this inconvenience could be leflened, eitber " by any alteration to be made in the mode of performing the " operation, or in the management of the dreffings!!! were " naturally induced to make trial of other means of ob" taining a radical cure of the difeafe."

This is the caufe why they have gone a-whoring after new inventions.

Mr. Benjamin Bell,-If in thefe paragraphs you have
" edges of the tunica vaginalis being allowed to adhere to the tefticle be-
" fore adhefion had taken place between the parts more deeply feated:
" In almoft every circumftance, the treatment of hydrocele by this « operation is the fame with what anfwers beft in a common abfeefs."
fpoken for yourfelf only, you may have fpoken very truly, and have given a faithful reprefentation of your practice; -but if you mean to reprefent to young men the principles of modern furgery, you have belied your brethren, and maligned the art. You have delivered fomething like the practice of the laft century, as a leflion for the young furgeon of the prefent day! hardly is any thing awanting to make your defcription perfect, except the ufe of fire ! for the older furgeons were as faithful worfhippers of fire as you are of the knife, and now we may eafily perceive that fimilar facrifices bave graced and exalted both reli-gions.-Nothing is awanting to make your operations perfect, but thruiting the red-hot poker through the bag (as you term it); that would indeed preferve a free drain, and prevent the collection of matter! A drawing of the hiffing poker is given by Scultetus, and you may eafily revive that obfolete way of obliterating the bag, without difgracing thofe principles of fyftematic furgery which diftinguifh your valuable writings.

Your cutting up the fcrotum in its whole length! your cutting up the tunica vaginalis of both fides, by an incifion made through the feptum fcroti!!!! your ftitching thefe wounds with a kipple of fitches, to prevent the telticles falling out !!! your oiling the lint to prevent it (the faid lint) from fticking to the tefticie! and your thrufting the faid oiled lint as deep as poffible, to prevent the tefticle, in its turn, fticking (or adhering) to the vaginal coat, are great improvements!!! worthy of the inventor.

But " the difeafe returning, in almoft every inftance, from thefe little precautions being overlooked;"-" the dif-
eafe returning, after incifion, in different cafes in the practice of others, but never in your own!!!"-the cutting open both fcrotum and tunica vaginalis quite down to the bottom of the tumour, left matter or ferum fhould lodge there!-the dreffing down to the bottom of the tunica vaginalis, for twenty or thirty days ! your furgeon-like indifference to a fwelling of the tefticle, equal to that which happens in gonorrhœea (which is by far the greateft and moft painful fwelling of that part we know of ) :-are poor evidences of your fuccefs. Thefe accidents, Sir, which you have fo honeftly enumerated, though they may be admirable fpecimens of your mild and modernized furgery, form but an unhappy prologue to your arguments againft curing hydrocele by injection; for that cure is fo eafy, compared with your long and well fluffed incifions, the fwelling which follows after injecting is fo fingularly large, and yet the pain is foflight, the fwelling alfo fubfides fo very gradually and perfectly ! that the furgeon who tries this method for the firft time, is both furprifed and pleafed with his own fuccefs.

The phenomena attending the cure by injection are fimply and modeftly related by Mr. Earle of London, on the fubject of whofe claims to the gratitude of the public, and the thanks of medical men, I fhall fay a few words.

There has prevailed among the writers on our art, an ungenerous invidious cuftom of fearching the mufty records of ignorant times; not for the purpofe of encouraging fcience, or promoting difcoveries, or fupporting truth,-but for difcouraging, infulting, grieving, with abfurd imputations, thofe by whom any new or ingenious
operation is propofed.-If the celebrated Harvey was thus infulted, well may Mr. Earle efteem it an honour to be abued.

It is on occafions of this kind that feraps of authority are produced! unintelligible as the monkifh Latin of a feudal parchment! but, like it too, of force fufficient to transfer the right of fome ingenious invention from its lawful owner to fome antiquated fool, whofe moth-eaten pages are all neglected except this precious text !-fome barbarian of Arabia, or of more barbarous Europe, who, writing like your wife felf, " about it and about it," has blundered upon fome expreffions, too ambiguous to fuggeft any real improvement, to ferve a good purpofe, or be ufeful to fcience,-too ambiguous alfo not to be ufeful to fome malignant and envious man! Even for fuch purpofes are thefe ghofts conjured up, from the " vaults of all the Capulets." The men who fit thus fullenly brooding over the inventions of others, imagine the very things they look for in thefe old books, juft as you, Mr. Benjamin, in your eery moods or poetical wanderings, fee Turks heads in the fire, and camels in the clouds? But why fhould I talk to you about the vaults, and the clouds, and the camels, and the Capulets? you look (as Sterne fays of thofe who are intent upon the affairs of this world), neither upwards nor downwards, but frraight forwards, towards better things. I acquit you (as I have already acquitted you) of conjuring any where, and leaft of all in the vaults of the Capulets, which you never have profaned: But you have conjured in your own way; you have retailed the hiftory of this method of cure out of Mr. Earle's own book; you have
pelted him about the ears with his own learning: You have difputed whether his practice be new or old, when you fhould have been debating whether it was right or wrong.

There is no doubt, Sir, that we are able to accomplifh the obliteration of this or of any fac by cutting it out, or by cutting it open its whole length, or by thrufting a red-hot iron in at the top and out at the bottom of the bag. And in double hydrocele, there is no difficulty in obliterating both facs by opening both at once, and cramming both with lint. But after having found out thefe fure ways of performing the cure, it was not unnatu-ral-(whatever you may think of the fuavity of this furgery) to feek out for an eafier way ! ! For this reafon, and not for want of confidence in the old method of cure, nor for want of the oiled lint to make it eafy ! have furgeons made various experiments. They have cut up the tumour with various forms of incifion ; they have cut it open with two fmailer incifions in place of one large continuous incifion; they have fometimes cut it up with one long incifion, and fewed it in the middle; they have opened it (the bag I mean) with cauftics! irritated it with fetons! tormented it with tents and efcharotic dreffings : They ventured at laft to pour injections into the bag; but their injections of fpirits and corrofive fublimate were fo ftrong, that they produced dreadful pain. It was about fifty years ago that thefe injections were firft ufed; till lately they were forgotten: But now that Mr. Earle has revived the method by injections, managing the cure with prudence and fkill; the pains and fuppurations attending the old me-
thod are produced as arguments againft his milder operation, and the corrofive fublimate and ardent fpirits are moft difingenuoufly contrafted with his harmlefs injections of wine and water.

When we inject a hydrocele, the ftriking in of the trocar is not more painful, as is acknowledged by all, than bleeding in the arm *. The drawing off of the water gives us leave to feel the condition of the tefticle, the condition of which we judge of in every cafe by the feeling, and not by the fight. The throwing in a little wine and water gives no pain; the patient feels a rolling fenfation, a flight and momentary pain fhoots up to his loins; in two or three days the tunica vaginalis (not the tefticle, as in your incifions) fwells; the fwelling is furprifingly large ! but there accompanies it only a fenfe of weight and a flight uneafinefs, which the patient rarely condefcends to call pain. For fome days the patient lounges upon his fettee, reads his book, plays cards in the evening with his friends, fleeps foundly, eats well, and puts a folution of fugar of lead to the bag if it inflames, and in four or five, or, at the utmoft, in eight or ten days, goes about his ufual affairs. A difappointment is rare. If the difeafe returns, it returns immediately, and the patient does not fuffer even the unhappinefs of fufpenfe. When the difeafe does return, it is only becaufe the patient has not fuffered that flight uneafinefs which is neceffary to his cure $\dagger$; and

[^22]he fubmits willingly to a repetition of that method which has failed only becaufe of its being too gentle! he has no more reluctance at being tapped in this way for the hydrocele any morning before breakfaft, than he would have to be bled for a headach.-Thus, even when it fails, no harm is done ! there are no incifions, no fuppurations, no coarfe dreffings with oiled lint, no grievous confinement of two months! This eafy operation has fucceeded, even where your painful incifions have failed! Mr. Cooper, furgeon in Glafgow, has lately cured by injection a double hydrocele, which, " would heart of man once think it," occupied both fides! and was cut with incifions by a certain " tory ftage of the difeafe, if fuppuration takes place, the patient muft fub" mit to that painful diftenfion which the fudden formation of matter in " this confined ftate always excites; to the febrile fymptoms with which " it is attended; and to an incifion equally extenifive for difcharging the " matter, as if the mode of cure by incifion had been adopted at firft!!!
" As an argument in favour of this operation, it is faid, that, when it " fails, we ftill have it in our power to perform it over again, or to advife " the radical cure by incifion. This, however, leads to much vexation, di" Arefs, and difappointment, in the firft inftance, while I think it probable, " that one effect of injections, when they do not fucceed, muft be, to ren" der any other operation that may be afterwards performed, more uncer" tain than it otherwife would be, or to require a higher degree of inflam" mation to be induced.
" Now, if this is the fact, and I firmly believe it to be fo!!! that injec" tions, in a great proportion of cafes, act chiefly by their aftringency! and " not by destroying the cavity of the tunica vaginalis, they may readily " be fuppofed to render not only the tunica vaginalis, but even the furface " of the teflis, mORE callous than it was before!!! by which a greater degree " of inflammation will be required than might otherwife be fufficient !!! " when any other operation becomes neceffary for the cure of the dif" eafe! !!"
furgeon! who PERHAPS, However, may not bave known of your improvements of the kipple of stifches and oiled Lint.

Except one unfortunate cafe operated upon in the Royal Infirmary by Mr. John Bell, we have heard of no ill accident. In that cafe the bag fuppurated, the tefticle was expofed for fome days; but I will explain this misfortune by a theory which I am fure you will fubferibe to very willingly: The fufferings of that fingle patient were owing, not fo much, perbaps, bowever, to the natural dangers of the operation, as to fome miftake on the part of the furgeon; and I truft he has more honefty than to wifh that a gond operation fhould bear the ill report of his awkwardnefs.

You have made many very pretty conjectures upon the effects of injections upon the tunica vaginalis and tefticle; pray, Sir, is it not in your power to convert thefe conjectures into experiments? Could you not have fpared one out of your 165 patients ${ }^{*}$, fome poor man now, to make trial of it upon? Or were you rather provoked at feeing the trial made upon a very rich man, of very extraordinary abilities, and of the firt rank in this country? Did the fory told by the Prince of Wales's phyfician $\dagger$ give

[^23]you a diflike to the operation? Go to, Sir, inquire into thefe matters a little (if it be no degradation to you to inquire into matters belonging to your profeffion), you will perhaps find reafon to retract the rafh opinion which you have obtruded upon the public, with violent fymptoms of jealoufy, and much of the effrontery of " an interefted and ignorant practitioner."

I have good reafon for not alking you any queftions about the cure by injection : but allow me to afk you a few concerning your own improved operation of the double incifion and oiled lint.-When you cut up the fac and fcrotum with an incifion down to the bottom of the tumour, is not the incifion nine or ten inches long, and often more than a foot in length ?-Does not that great wound inflame in four or five days, and fuppurate plentifully during the reft of the cure?-Is not the oiled lint thruft down moft inexorably to the bottom of the wound?-Is not the reunion of the lips of the wound carefully prevented, till there be a filling up of the fac, or a total adhefion of the tefticle and fac?-Is it not your principle to treat hydrocele like an abfcefs, the whole cavity being brought to fuppuration? -If all this, or much of it, or any of it (for I will not let you flip off the hook), be in any degree true? If every cure of yours begin thus with incifion, fuppuration, and fwelling of the tefticle! then will I tell you very exactly how the account ftands betwixt you and Mr. Earle. Your fucceffes begin! juft where Mr. Earle's miftakes, or miffortunes end :-Your cure begins with incifions, fwelling, fuppuration, fevere dreffings, long confinement, great pain!!!-Mr. Earle's patients fuffer but a temporary fwell-
ing, a flight uneafinefs, which they feldom choofe to call pain : there is no incifion-no open wound-no painful dreffings-no fwelling of the teftick, (but only of the fac; or tunica vaginalis which furrounds it); and the end of his worft and moft unhappy cafes is but fuppuration, and a neceflity of opening the fcrotum with a lancet, and of treating the cafe according to your principles, " like an abfcefs."

There are two things you feem to have forgotten entirely; that there is a duty which every man, honoured as you are with the confidence of the public, owes to that public! Have you not alfo forgotten your own very elegant Ciceronian reflection? " That every practitioner is apt to be " prejudiced in favours of a particular method, fo that " he generally continues to practice that mode, and no " other; and finding it commonly fucceeds, he by de" grees comes to persuade himself, that other methods of " cure, with which he has not had fuch opportunities of " becoming acquainted, are liable to objections, which " thofe who have practifed them do not find to be the " case?"

You feem alfo to forget entirely the report whieh you yourfelf have given of this method of cure by injection. " It often happens, that the pain is inconfiderable from the " firft : Scarcely any inflammation or tumour is perceived " on the teftis; and the patient, confidering himfelf as " well, walks abroad, in ten, twelve, fourteen, or fifteen " days!!! But, with others, a very fevere degree of pain " takes place on the firft introduction of the injection, not " merely in the teftis, but in the baok, and over the whole
" loins. In moft inftances, this foon becomes moderate, " and the treatment!!! goes eafily on; but, in others, it is " fucceeded by great inflammation in the teftis and fcro" tum; and, in a few, this terminates in collections of " matter within the cavity of the tunica vaginalis."

Let me remind you, that while it is in fome only that the injection " is fucceeded by great inflammation in the teftis and fcrotum," no patient whofe fcrotum has been flit up with the knife or fciffars, can efcape a very fevere inflammation! If in a few only the cure (by injection) terminates in collections of matter within the tunica vaginalis, then there are but few cafes in which we need to recur to your principle of treating hydrocele like an abfcefs. -I know the fenfibility and tendernefs of your difpofition, and would fain inftruct you from your own book (for you have refolved to be inftructed by no other); I wifh, out of mere tendernefs to your milky nature, to fatisfy you, that this method of Mr. Earle's, confidered merely as an experiment, is neither a defperate nor a cruel one.

And now, Sir, I will honeftly confefs to you, that your reafons againft this operation feem to me fo weak, that I cannot but think your prejudices muft be proportionably ftrong. One author has fatirized our whole trade, nay, flandered it moft villanoufly, by prophefying that this operation would never be well received: And why ? do you think: Becaufe " furgeons have a better chance of getting fifty guineas for a good long incifion, than for a fquirtfull of Port wine?". I know I am in no danger of offending you, by repeating this vulgar, infolent expreffion; for had this been your reafon, you never would have ftood
higgling with the public, but would at once have faid of the operation, "It won't do." You have an antipathy, not fo much to the operation, as to the man who propofed it. Mr. Earle infinuates, that you muft know little about your profeffion who are ignorant of the meaning of the word Hydatid, (a word which is now in every mouth). It was indeed unlucky that you had not read Bidloo, Swammerdam, and John Hunter, with the pilfering diligence of your namefake Jonathan! Was it not a pity, fince you undertook to talk about hydatids, but that you had known of their being living creatures? You might then have efcaped the criticifms of Mr. Earle; you might have recovered your faux pas handfomely enough; and when all the other furgeons were performing this cure by injection, you might alfo have been performing it with great eclat ; or, at leaft, you might have been " remarking in your own way, that you bad often thought of puttiug that operation in practice; and that you had now made, upon different occafions, various trials of this remedy; and after different fuccefsful attempts by this new mode of treatment, had come to entertain a more favourable opinion of it ! ! ! with whatever farther additions your prudence might have fuggefted.

Of all the queftions which I have ever wifhed to afk at you, not one has occurred fo often to my mind as this, " What can be your particular reafon for faying, that hydrocele cured by injection will return in three years *?"

[^24]You have mentioned "the ninth or tenth of all on whom the operation has been performed." as if on the authority of others: But your own paramount authority you have referved for the proof of the moft incredible of all accidents, viz: that this difeafe, though apparently cured, may return at the diftance of three years $\dagger$ !!! I doubt not your authority, far from it ; my confidence in your veracity is the very reafon why I inquire the caufe, from one apparently fo well acquainted with the fact: Why three years? Although " three years!!!" founds very oddly, I am confident, nevfrtheless, however, that you have as good grounds for prognofticating the return of hydrocele in three years! as almanack-makers have for prognofticating about the weather. I have obferved that you are curious in thofe matters! Upon comparing the time during which you (who never performed the operation) propofe leaving the wine injection in the fac! with that advifed by others! I can remark a difference of exactly half a minute, which gives me a very high opinion of your abilities. I have heard alfo, that you temper poultices by the thermometer! and had I not fufpected a fort of plagiarifin from Mr. Still $\ddagger$, who has for fome years paft tempered every thing by the
" ninth or tentb part of all on whom the operation is performed; and is " five of eight or nine! at fome uncertain period in future!!!
" Although in fome the difeafe returns in the courfe of two or three " weeks, in others, it is not perceived for feveral months; and, in fome, " as I have obferved above, not till two or three years have elapfed."
$\dagger$ " In fome it is not perceived, as I bave OBSERved, till two or three xears hate elafsed." Page 153.
$\ddagger$ A famous Cutler in Edinburgh.
thermometer ! ! ! I fhould have mentioned this along with -the double incifions! the oiled lint! the kipple of ftitches! and the other difcoveries with which this new book abounds.

This fortunate expreffion, new book, reminds me of one queftion more-how unhappy fhould I have been had I forgotten to afk it! Why have you unrooted this fair plant from its natural foil, where it flourifhed among others of its kind! Why expofed it to all the dangers of tranfplantation! to endure, fingle and unfheltered, the cold and blighting blafts which may blow upon it? In plain profe, why is this a new book? Is it for the fake of convinc $\cdot \mathrm{g}$ all the world, that though there is no danger in curing hydrocele without incifions! it is neverthelefs wrong? Or was it written to convince the world, that pain is no evil-confinement, amufement-and that cutting is curing !!! Was it for the fake of communicating to thofe who have been cured by injection, this very fingular difcovery, that their hydroceles will affuredly return (at leaft fix out of ten) in lefs than three years? Did you, or did your bookfeller, contrive this notable fcheme for feealing, like L'A vare, the hay from your own horfes? Is this new-old-book a mark of poverty or a mark of riches? for riches, as moralifts obferve, fometimes operate like poverty: Or is this poor crop, from a field once fo rank and fruitful, the mark of an exhaufted foil?. Jamque adeo fracta es ætas effætaque tellus? Vix animalia parva creat quæ cuncta creavit? If you fufpect fo alarming a caufe! give your wit a feventh year's jubilee! reff from your labours! and regale the public with fafting.

Yet, when I reflect upon certain circumftances, I am perfuaded, that if this little book be inferior to your other volumes (a point which, however, is not to be rafhly decided), the accident arifes merely from your generofity! I know, my dear Sir, your modefty will be wounded by the frequent repetition of this ill founding, infulting word;" but if my duty be too bold, my love is too unmannerly." -I will difclofe your virtues!-You have done the moft generous thing in the world; you have (and God fend it may not prove a felo de fe), divided your brain into four parts ! !! and though thofe three gentlemen, with whom you have fo condefcendingly and freely fhared it, do not feem to have profited in any very particular manner ! the corner bit which you have referved for yourfelf, is not fufcient to keep you out of fcrapes !

Yet this term, dividing into quarters, or any other implying folidity, can with no propriety be applied to your fenforium. I believe it were better to confider brain as a fluid! That of your namefake Jonathan, for example, is a fluid-it is plain vinegar-it is a diffolved colcothar of vitriol ; and, as it diftils through his pen, it drops a blot on every thing it touches ! it eats out colour, ftuff, and all! it corrodes, Sir, like aquafortis !-Yours again is an inoffenfive fluid ! a mild, vifcid, undefæcated pblegm! only, by diluting it with the more thin and watery cerebellums of your co-mates, it has loft its vifcidity, tenacity, and all its other remarkable properties: In place of being, as once it was, as ftiff as birdlime! it is now little better than mere ferum. This dangerous experiment of yoursthis adventurous dilution of brain-reminds us of Spallan-
zani's experiment of taking up on the point of a needle an almoft invifible drop of feminal fluid, with which he impregnated a great jar of water, and with that water impregnated innumerable eggs of fhe-frogs and water-neuts.

You now perceive, honoured Sir, by experience, how dangerous familiarity is to greatnefs; for even I am come at laft to afk queftions of you as confidently as if you were juft a common perfon. A fit of curiofity, almoft feminine, has come upon me, and I cannot reprefs it ; I know you will think I queftion with an idle tongue: No; I affure you I afk this queftion in pure fimplicity.

Your book I think I underftand very thoroughly, all but one fmall paragraph, which is truly perplexing. You mention, "That at one period a practitioner in this country ! got into notice by announcing freguent cures of fistula in ano, as well as other finufes. Some timid patients, both here and in England, put themfelves under his cure. His reputation, however, was not of long duration *!"

Dear Sir, explain to us, is this meant! literally ! figuratively ! or prophetically? With infinite care have we looked over the newfpapers of THIS country ! but never have we found them polluted with thofe kinds of advertifements which fo often difgrace the newfpapers of the other country! We have beeninformed of no quack fo defperate astoadvertife frequent cures for the fiftula in ano. We find, indeed, in all the newfpapers of laft year, the following advertifement, but cannot fuppofe it to be the advertifement you

[^25]
## II2 OF THE USE OF NEWSPAPERS IN SURGERY.

allude to, both on account of a glaring anachronifm betwixt the advertifement and your text, and on account of fome other circumftances, which it is needlefs to explain.

## " ADMIRAL LORD DUNCAN.

" We have the pleafure to announce, that Admiral Lord Duncan is completely recovered after having undergone a very dangerous operation, which was performed by the celebrated Mr. Benjamin Bell, Surgeon of this City. The fuccefs of this operation affords much caufe for joy to the inhabitants of thefe kingdoms *."

Neither yourfelf nor your partners ever could have done this; the ftyle is quite unworthy of them or of you;-indeed it is little better than the advertifement of John Partridge, practitioner in phyfic, leather, and aftrology; and is, in all refpects, fo fore a libel upon thofe whom it was intended to honour, that I do pity you, and moft vehemently exhort you to prevent in future fuch officious friends. Compofe the advertifements yourfelf. Being a practitioner in books and phyfic (though not in aftrology -I have acknowledged you are no conjuror); being a. writer on the venereal difeafe, the difeafe of the teflicle, \&c.; being, moreover, a cutter and curer of fiftulas; I am aware that you will often find yourfelf in circumftances peculiarly delicate! I am fenfible you would, at any time, choofe rather to be a lofer, both in money and reputation, than offend againft decorum. But, Sir, I have the happinefs of

[^26]fuggefting an expedient, by which you may, without the dlighteft taint to your reputation, gain your end, and perhaps with an increafe of literary character: When you at any time find yourfelf in this conftricted condition, let off your puffs in Latin; and to fave you the fhame of thumbing the fyntax at your refpectable time of life, I here prefent you with a formula of fingular and approved elegance.

When $\mathrm{G}-\mathrm{S}-\mathrm{t},-\mathrm{M} . \mathrm{D}$. had thrown away the Paper Cap, and affumed the Triangular Bonnet,-and before he began to cure Scrophula, Cancer, and all incurable difeafes,-he ftuck up, moft unpremeditately and fuddenly, upon the walls of Alma Mater, the following notice, or rather warning :-Gulielmus N -T proponat dare cursum peculiarem de morbis syphiliticis, \&c. \&c. to the great aftonifhment of the natives of the faid Alma, and the utter confufion of the profane vulgar.

## SYDROPHELL's <br> CONVERSATION AND CRITICISMS.

$\mathrm{O}_{\mathrm{n}}$ a certain evening, many very worthy gentlemen being with myfelf affembled to confult what fhould be done with Jonathan Bell furgeon, after much agitation, I myfelf propofed the method of the Irifh Rat-catchers, who rhime rats to death, and undertook to perform the operation or incantation myfelf.

THE LOOKING-GLASS.
A bear of hag and manners rough, At climbing trees expert enough ; For, dext'rouly, and fafe from harm, Year after year he robb'd the fwarm.
Thus thriving on induffrious toil, He glory'd in his pilfer'd dpoil.
This trick fo fwell'd him with conceit,
He thought no enterprife too great.
Alike in fciences and arts,
He boalted univerfal parts;
Pragmatic, bufy, buflling, bold,
His arrogance was unconitrol d:
And thus he made his party good,
And grew dictator of the Wood.
The beafts, with admiration, flare *,
And think him a prodigious bear.
What the effects of thefe rhimes were upon the general conftitution or Uropoietic organs of the faid Jonathan, we have not yet learned. No fooner had I compofed the above fable, than I went ftraightway to Sydrophell, who, though he has no genius for numbers (unlefs it be for algebra and the Arabic numbers), has yet an admirable talent for criticifm. I was privately fenfible of fome imper-

* Vide No. I.; of which Number I confidered this as one of the beft Ornaments in the fimple flyle.
fections in this little poem; but I comforted myfelf with a very obvious reflection, that many a clever fellow has got a fall betwixt Rhime and Reafon, as, betwixt two ftools, the -_falls to the ground.-I afked my friend Sydrophell, firft, Whether " induftrious toil," and " pilfered fpoil," agreed ? he faid, No-not in fenfe, but they agree in found, which is much better. I afked him, Whether " party good," and " Dictator of the Wood," was witty? No, he faid, but it was puny ! and to his certain knowledge would pafs current with the gentlemen to whom it was particularly addrefled for fterling wit. You feem, faid I to Sydrophell, to fancy yourfelf playing 2 game at forfeits, and that you are bound to anfwer to every queftion with a banter and a compliment : Be ferious for a moment, faid $I$, and anfwer me this one que-ftion-What do you think of calling it a looking-glafs? A $\mathrm{p}-\mathrm{fs} \mathrm{p}-\mathrm{t}$, you mean, I fuppofe, fays Sydrophell: and that is fo old and fo vulgar a joke, 1 furely would by no means repeat it. Pray, then, what do you fay to this ! fhould I make my bear a White Bear, catching fifh; or a Black Bear, herrying bee-hives? That, fays Sydrophell, depends upon the nature of the beaft. I now began to perceive, that Sydrophell was in an evil humour; but there was one queftion yet remaining with which I knew I fhould be able to charm him into good humour, 'for it related to fcience: Pray, now, my friend, faid I to him, what think you of my dexterous application of a Bear herrying Bees to phyfic and philofophers.

> At this deep Sydrophell look'd wife, And ftaring round with owl-like eyes, He put his face into a pofture Of fapience, and began to blufter.

For having three times fhook his head, To ftir his wit up, thus he faid :
Art has no mortal enemies,
Next ignorance, but owls and geefe.
A bear's a favage beaft, of all
Moft ugly and unnatural ;
Whelp't without form, until the dam Has licked it into fhape and frame. But all thy light can ne'er evict, That this fame fhaggy bear was lick't, Or brought to any other fafhion, Than his own will and inclination.

Difgufted with this manner of talking, and refolved to efcape all faucy premature criticifm, I compofed the Civilized Bear privately, and, without confulting Sydrophell, or any of the crew, here throw it upon the genèrofity of the public, as a natural conclufion of the Bear of fhag and manners rough.

## THE CIVILIZED BEAR.

FROM PILPAY.
Addrefled to Mr. Benjamin Bell Er Co. $^{\text {Con }}$
The bear now tir'd of climbing trees, Defiring much to live at eafe;
Sick of the mountain's piercing cold, Percciving too that he grew old, Efpied a warm and quict valley. Where a good fober gard'ner daily, With conftant pains and careful toil, Trimm'd the trees and turn'd the foil; Down to the gard'ner Bruin went, To grumble forth his difcontent; And hardly even indulg'd in grumbling, So thoroughly, is hunger, humbling.
Soon he found out the delving man, And kifs'd his paw, and thus began :

No longer fit the bees to herry,
All ftiff with age, of climbing weary :
Scanty's the meal poor Bruin draws,
From fucking all day long his paws :
His ears, his thag, you fee in ruin ; Oh hear, and pity honeft Bruin.
Take him, and from farvation fave, He'll be your very willing flave;
And as for trudging, never fpare, Confider, Sir, your Bear's-your Bear.

In fhort, the Bear a mafter finds; Mafter and Bear are mighty friends. The bear now quite familiar grown, Follows the gard'ner up and down ; And when at noon alleep he lies, Bruin ftands by to fcar the flies.

Once on a fultry fummer's day,
The wearied gard'ner fleeping lay; While Bruin flood upon the watch, To fright the flies he could not catch, One forward fly, with reflefs wing,
(Perhaps the fly, too, had a fting)
Buzzed round his face,
From place to place:
The mouth, the nofe, the cheek, the clin, The quivering lip, the twinkling eye, Showed how the gard'ner felt the fly.

The bear, with ever kind intent, A-buttling round and round him went; Chafing the fly with awkward pother, Firlt from one fide, then from t'other. At laft, the fly the temple gains ! With lufly paws the honeft bear Up's with a flone-marks to a hair, Knocks off the fly-knocks out the brains,

## MORAL.

$T$ bis tale, from ancient Pilpay, Joows, A foolifh friend's the woorft of foes,
come his men, and not true members; for he did make them fellows of faid College, but not burgeffes of this Good Town, and did thus moft felonioufly referve to himfelf the power of cancelling and protefting the votes of the faid members ; and when an election came on, he went up to the Council Hall with faid protefts in his pocketslike the man who went to the fhrine of Apollo with a living bird under his cloak-which, if he wifhed to have alive, he produced alive-but if he wifhed dead, gave it a fqueeze, and it was dead.-The Prefident of the Royal College of Surgeons, ftruck with the difingenuity of this practice, and fenfible of the danger of allowing individual members to fuffer from the malice of any former Prefident or Prefidents-feeling himfelf, moreover, called upon by all the feelings of a gentleman, greatly concerned alfo for the honour of the College, did ftraightway order a general overbaul of all the parchments, letters of citizenfhip, and records of examination-and, with a moft honourable impartiality, ordered, that every member fo defective in his titles fhould be examined, paffed burgefs, ticketed, and admitted anew.-The College was in the utmoft confufion and difmay ;-many titles were unexpectedly found defective; the clerk of the Corporation fat in his office for three days, and the importunity of the queftions-Is my ticket good?Was I regiftered ?-AmI not a member of the College ? AmI to be re-examined?-Is my name marked down? -Do they really examine?-Have they any defign under all this of rejecting us?-The perpetual irritation at all hours was fo intolerable, that he fell into a jaundice, took country rooms! left his deputy to officiate! The Pre-
fident himfelf took the alarm;-and at laft nothing was left of the College but the cittle skeleton and the great leaden mace lying upon the table-

When Mr. Benjamin Bell and his friends, with unexampled generofity (like the St. Pierres putting the ropes voluntarily about their necks to fave the city) came forward, and offered themfelves to be firf examined; -which ceremony they accordingly underwent in the following order.

Firf-Mr. Benjamin Bell was brought forwards to the great table-the mace and the fkeleton, the pharmacopeeia and Albucafis, were laid upon the table;-and the clerk, with his ufual folemnity, whifpered out the oath.

Firft Examinator.
๑. Pray, Sir, where were you educated?
A. At the Hofpitals of Edinburgh, Paris, and London*.
2. Almoft all furgical operations, as you very well know, begin with an incifion-What fort of incifions do you make?
A. As long as poffible.
2. Various authors have written upon the direction in which the fibres of fkin and mufcles fhould be divided, in what direction do you make your incifions?
A. Always acrofs.
2. How deep?
A. Down to the bone.
๑. What are you feeking for by fuch deep incifions?
A. "Tendons, and muffles, and nerves-and any thing that may occur."

Exam. Really, Sir, this practice is fomewhat new.-Candidate. "Sir, there is nothing in all furgery of the propriety of which I am more fatisfied."
2 Pray, Sir, when a man gets a blow upon the head, lies ftupid and fick, and bleeding from the note and ears, what do you do?
A. I trepan him.
2. That's rather fudden, Sir. How do you proceed in your operation?
A. I frt cut open the fcalp.

2 And if you find nothing wrong, no ign of fracture, depreffion, \&c.
A. I perforate the full.

2 . And is it not poffible, that, having done fo, you may fill find nothing wrong?
A. Very poffible; but as there may be fomething wrong under the membranes, I next perforate the Dora Mater.

2 . And if you fhould find nothing wrong there, would you not regret what you had done?
A. Surely not ; for if the patient lies flupid, although, no doubt, he fometimes recovers, yet it is certain there mut be fomething wrong fomewhere; "it will be therefore proper to proceed to perforate every accessible part of the scull till the cause of the compression is discovered *."
2. What are your realons for this bold proceeding? I

[^27]can tell you it is fomething out of the common way ; and indeed, Sir, I know no way of finifhing this operation of yours thoroughly,
" Without trepanning of the fcull,
" As often as the moon's at full."
A. I have laid down a rule, Sir, never to enter into theoretical difquifitions; and I hope I fhall be excufed even here on this folemn occafion.
2. Well, Sir, that's not quite our way ; but, however, we will come to lefs bloody fubjects. Pray, Sir, when a patient breaks his leg, what do you do?
A. I cut it off.

All exclaim, Cut it off!
2. I mean, Sir, when it is not much broken, when it is what we call a fimple fracture.
A. I make a compound fracture of it.

All exclaim, A compound fracture! What does the gentleman fay? a compound fracture !
2. What do you mean, Sir, by making a compound fracture of it?
A. It is neceffary thus: In compound fractures we obferve how eafy it is, from the great fize of the wound, to pick out the fractured pieces of bone; " but in a fimple fracture, where the fkin remains entire, as we cannot judge with fuch certainty of the nature and extent of the injury, nor of the probability of our being able to preserve all the loofe portions of bone, we endeavour, in the firft place, to accomplifh a cure in the eafieft manner; but when this does not fucceed, when the ends of the bone remain loofe long after they fhould have been united, and one or more
detached pieces are difcovered, thefe are to be considered as extraneous bodies, and ought to be removed with the fingers or forceps at an opening made through the foft parts for this purpofe *."
2. By incision, you mean?
A. Yes, Sir.

2 Is there any other occafion in which you imagine it neceffary to convert a fimple into a compound fracture ?
A. Yes, "Various occafions." "But the moft perplexing caufe preventing the reunion of fractured bones is a portion of a muscle, ligament, or some other-soft part, paffing between them $\dagger$."
2. Would you think on fuch a fufpicion as this of cutting into a broken leg ?
A. Not abfolutely upon a fufpicion: " We judge that this is the cafe, when the pain and tenfion of the injured part have been more fevere than ufual from the firf. When particular movements of the limb occafion fevere pain and twitching of the mufcles, that ferve to move it, and when the ends of the fractured bone do not unite at the ufual time."

2 Do not twitchings and pain occur in every broken limb; furely you have no notion of meddling with a limb on that account?
A. No, not abfolutely; I would not make the incifion at firft ; but " as foon as there were reafon to think that a cure is prevented by the caufe we have juft mentioned, we fhould endeavour to remove the portion of interpofing

[^28]Qij
membrane or mufcle, by putting the limb into all the variety of postures by which it will be moft readily effected *."
2. God blefs me, Sir, do you mean that $y$ ou would twift and turn a broken leg with any expectation of difentangling twifted tendons, \&c.
A. Sir, "It is the duty of a furgeon to do every thing in his power for his patient; and no perfon who has that degree of courage and fteadinefs that is neceffary for the practice of furgical operations will venture to hefitate in the leaft degree $\dagger$."
2. For heaven's fake, Sir, what do you mean? you have been yourfelf engaged in practice, and we are now afking, not fo much what may be done, as what you actually have done, or written down as a rule for others to do. You fpeak of operations; is it poffible you can mean to propofe any operation in this cale?
A. No, Sir, I don't know that I abfolutely mean an operation; " but when this twifting and turning of limb does not fucceed, as will often be the case, and when the bones ftill remain loofe, long after the ufual period, we ought, without further hesitation, to make an incifion upon the fractured part."

The gentlemen prefent obferved, That though the Candidate had refufed on other occafions to enter into theoretical difquifitions, he had made ample amends, by laying down fo curioufly the doctrines of loofe bones, and loofe interpofed

[^29]membranes, ligaments, and mufcles; and this chorus of examinators having concluded their eulogium, the queftion went on as follows:
2 Pray, Sir, fince we are fpeaking of broken limbs, what is your opinion concerning callus? don't you think the old ftory of exuberant callus is juft a ftalking horfe, a mere apology ufed by bad furgeons?
$A$. Quite the reverfe, Sir; "we are often difappointed in obtaining complete cures of fractures, by the limbs remaining unfeemly from an overgrowth of callus. It is not a common occurrence, but! every practitioner muft have met with it. As far as I am able to judge in fractures attended with much inflammation, where this inconvenience is moft apt to occur, local blood-letting proves more ufeful than any other remedy in preventing it. I have, in fome inftances, derived advantage from a contrnued gentle pressure, which is beft applied by means of a thin plate of lead. But our fafeft courfe is, as foon as the callus begins to be too Luxuriant to acquaint the patient with the probable event ; and he muft be very unreasonable indeed if he afterwards repines at what the utmoft care could not prevent *."

Exam. I muft be plain with you, Sir. My opinion is unchanged. I never faw what is called exuberant callus, which did not appear to me to be plainly the angle of an ill fet bone; even the clumfinefs of a compound fracture is but the angles of many pieces of bone: But there certainly the patient has no title to repine, nor indeed has he any

[^30]inclination to repine; he is fenfible that he is well off in having his leg preferved in any condition. But to our bufinefs.
2. Pray, Sir, is it your practice univerfally, in all broken bones, to make compound fractures out of fimple ones? Do you perform the fame operations, for example, on a fractured rib?
A. Yes, Sir. You might obferve, that when I fpoke of the fcull, I demonftrated how to make a fimple fracture a compound one; or rather, how to trepan the fcull when there was no fracture at all: and furely, in fo common a cafe as a fractured rib, I would not hefitate. Thus, " if any inequality is difcovered, by one end of a fractured rib having rifen above the other, we ought to endeavour, by moderate equal preffure, to replace it ; and to prevent it from rifing, a broad leather belt fhould be applied and drawn tight, as tight as the patient can eafily bear it. *."
" But when the oppreffed breathing is kept up, by air efcaping from a puncture in the furface of the lungs, or by blood difcharged from a ruptered intercoftal artery into the cavity of the cheft; or when the pain is prevented from fubfiding by the fracture being forced in upon the pleura, it becomes neceffary to make an opening with a fcalpel. Where a portion of rib is merely forced inwards, this fhould be done directly upon the injured part; and on the rib being laid bare, we ought to elevate that part of it that is depreffed, ertuer with the fingers, forceps, or with a fpathula $\dagger$."
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2. Pray, Sir, is not a broken rib one of the moft frequent accidents?
A. Yes.
2. Did you ever fee the projecting end of a rib ?
A. No; Sir, not that 1 remember; but I'm not fure.
2. Is not every broken rib attended with pain? and is not emphyfima, from fiacture of a rib, a very frequent occurrence?
A. Yes.
2. Did you ever cut upon a depreffed rib, and hook it out in this manner with your finger?
A. No.
2. Did you ever fee any other furgeon do this? or did you ever hear of its being practifed?
A. No.
2. What would you do, now, in a fracture of the fternum?
A. "Clearly I am of opinion, that a fimple fracture of the fernum is to be considered in the same hight with similar injuries done to the ribs, and ought to be treated in the fame manner *."
2. You mean, Sir, that it fhould be trepanned without the fmalleft hefitation, as you exprefs it?
A. Yes, Sir.
2. Is there no other way ?
A. Sir, " the practice of alvising deep inspirations, and of laying the patient upon bis back over a large barrel, or any other convex body, muft often do mifchief, by

[^31]pushing in the lungs with more force againft the depressed portion of bone than they otherwise would be." " When it therefore happens that the pain, cough, oppreffed breathing, and other fymptoms, do not yield to blood-letting, and other parts of an antiphlogiftic courfe, fome other method of cure should be attempted. An incifion fhould be made upon the injured part, of a sufficient length to admit a free examination of the bone when the depreffed part may be raifed either with a common fcalpel, or a levator, if there be an opening that will admit an inftrument *."
2. Really, Sir, your anfwers found in my ear as if you had a fettled antipathy againft fimple fractures; as if, in fhort, you thought you were not anfwering chirurgically, unlefs you explained fome terrible incifion. Pray is there any broken bone, great or fmall, which you do not cut upon? As far as I recollect, we have fpoken of every kind of fracture, except fracture of the vertebre: In fracture of the vertebre, how do you proceed?
A. Sir, I proceed by the fame general rule. "Thus, whenever we find that the fpinal marrow is compreffed, as the immediate effect of an injury done to one or more of the vertebræ; and where there is reafon to think that the compreffion is produced by a fracture and depreffion of a portion of bone, as we know from experience that every fuch cafe will terminate fatally $\mathrm{IF}_{\mathrm{F}}$ the caufe of comprefion be not removed, it would furely ! be better ! to endeavour! to raife it! than! to leave the patient! under an abfolute cer*

[^32]tainty of fuffering. By laying the injured parts freely open, we may be enabled to raise that portion of bone by which the compreffion is produced."
2. And pray, Sir, is not, in every cafe, the compreflion produced by a fracture and depreffion of a portion of the bone?
A. Yes.
2. And pray, Sir, fince people are breaking their legs and their ribs, and their necks, and their backs, every day, fince you mult have had many opportunities of making incifions of fufficient lengtb, and of hooking out ribs and fternums, and pieces of vertebræ, with your fingers and levators, have you ever performed any of all thefe operations which you have been defcribing?
A. No, Sir, never.

Then, Sir, I have done. I am upon the whole very much pleafed with the honefty and ingenuity with which you have anfwered, but I could have wifhed upon the whole that you had defcribed no operations but fuch as yourfelf or fome other perfon had performed. Though we like to encourage ingenuity in the young people who appear at this Board, we never fuffer them to conjecture about operations; and had you gueffed and fuppofed, and conjectured, and concluded, in this way, the firft time you were examined in this Hall, the indecency of the thing would have been lefs remarkable, and more pardonable ;forty years of practice fhould have done fomething for you.

## Second Examinator.

2. Sir, if you pleafe we fhall now take an anatomical fubject; and one of the moft ufual queftions you know in
this place is about the ftructure of the eye, will you be fo good as enumerate the coats of the eye?
A. "Anatomifts have confidered the coats of the eye as NUMEROUS ! ! ! but there are only three which can be diftinctly traced; namely, the screrotic, the Choroid, and the Retina. The former has indeed been fuppofed to confift of different coats, to all of which names have beeen appropriated, viz. The tunica albuginea!!! the cornea opaca!!! cornea lucida!!! \&c. and even the choroid has been imagined to be formed of different tunics: Büt although a tedious maceration may feparate fome of thefe parts into different lamellæ ! ! ! the knife of the anatomif is not able to do fo; and as diftinctions of this kind can never tend to any ufeful purpofe, they ought to be univerfally rejected *!!!"
3. Are you fure, Sir, that any anatomift, except yourfelf, has mentioned the albuginea as belonging in any way to the sclerotic coat $\dagger$ ?
A. Yes, $\mathrm{Sir}-\mathrm{No}$, Sir-I'm not fure.
4. Pray, Sir, is not that furface of the choroid coat, which fecretes the pigmentum nigrum, which anatomifts have named the Tomentum, which is called alfo the Tunica Ruifchiana, very different in appearance and in ftructure from the outer lamella of the choroid coat?
A. Perhaps it is.
5. What are the ciliary proceffes?
A. " Towards the middle of the iris, a number of radiated lines are obferved, which run from the circumference to the centre : these are denominated ciliary processEs!!! and on their action the contraction and dilatation of the pupil appears to depend !!! for it feems to be doubt-
ful whether any circular fibres exift in the iris or not $\dagger$ !!!"
Exam. Sir, to be plain with you I never heard before of the ciliary proceffes having any connection with the iris, except by touching it at the ciliary circle; as for the ciliary proceffes being fibres, for contracting the pupil! the doctrine is quite new.
6. What is the Retina ?
A. "The third and moft internal coat of the eye is the Retina, which feems to be an expanfion of the optic nerve. It does not line the whole cavity of the eye, but appears to terminate over the anterior edge of the sac or capsule of the vitrisous humour ! ! which we fhall afterwards have occafion to defcribe *."

Exam. Really, Sir, thefe are very odd defcriptions; have you got them out of Dr. Monro's new quarto book, which fome people may remember to have feen about three years ago?
A. Sir, it is very well known that I have laid down a refolution of reading no books but my own; and indeed I mentioned that fact already.
2. Pray, Sir, are thefe all the coats of the eye?
A. "Yes, Sir, thefe are all the proper conts or coverings of the eye; but there are two mbmbraneous expansions which likewife cover a confiderable portion of the back part of the globe!! and which by many have been enumerated as part of its tunics ! ! namely, the albuglNEA! ! which we have already mentioned, and the tunica conjunctiva $\dagger$ !!!"
2. Pray, Sir, are the tunica albuginea, and the conjunctiva, different coats of the eye?
A. Yes.-Exam. Indeed!!!
2. Pray, Sir, give me leave to afk, are thefe two different coats, the tunica conjunctiva, and the tunica albuginea, in the back part of the eye?
$A$. They certainiy are, Sir; at leaft for any thing that I know to the contrary.

Exam. Then, Sir, you may walk out of the room.
The reafon of the Examiner defiring the Candidate to walk out of the room, was, that during feveral of thefe replies and rejoinders, there had been immoderate burts of laughter from the younger part of the fociety; fome of the members who were next to take their TURN chuckled exceedingly at the thought of getting through their examinations fo eafily, and others of the fociety were ferioufly offended: They knew that Mr. Benjamin Bell could not be ignorant of the coats and humours of the EYE, a queftion to which correct anfwers are expected from every apothecary's boy. His anfwers, which he meant after all, merely in joke, they took as a ferious infult upon the College. But this confufion lafted only for a moment. The Candidate was called in again; and the Examiner having, with a confiderable degree of refpect, and we thought even of deference and undue humility, begged him to be compofed, and to anfwer ferioufly, went on as follows:

Sir, we propofe to refume the fubject, and to ark a few queftions relating to the difeafes of the eye. Pray, Sir , what is the meaning of the name hypopyon ?
A. It is a Greek word, Sir, fignifying a tumour projecting from the eye.
2. Does it not fometimes fignify a collection of pus under the coats of the eye?
A. I believe fome authors have underfood it fo, but not all.
2. What is the meaning of the word Staphyloma ?
A. It means a collection of matter in the coats or humours of the eye.
2. Pray, Sir, does it not fometimes fignify an odd fort of a black kind of tumour projecting from the coats of the eye like a grape?
A. Perhaps it may, Sir.

2; And pray what is an onyx ?
A. " The onyx is a difeafe fo named from its refemblance to the nail of a finger *."
2 The nail of a finger, Sir !!! faid the Examiner; you furely muft mean the ring upon a finger: Onyx, you recollect, Sir, is an onyx;-why, it is an onyx fone, Sir.
A. Very true, Sir, fo it is; I meant the ring of the fin-ger-I meant the ftone of an onyx ring.

2 And pray, Sir, what is the meaning of the word uneuis?
A. Unguis, Sir-I don't recollect, Sir! exactly, Sir! but! I believe! it means a difeafe of the eye, which-refembles an eel.


Here the hall was again in an uproar. The gentleman was again defired to retire. It was now manifeft that this gentleman's voluntary offer of fubmitting to an examination was made with no better defign than that of infulting the College ; and after advifing and debating what fhould

[^33]be done, the examiners agreed to call him in again, and to do their utmoft to reject him.

## Third Examinator.

I am requefted by the College, Sir, to pat fome irregular queftions to you, on various occurrences in furgical practice. Wounds, every perfon who has that regard for his profeffion which every one ought to have, a wound, which is fo common a fort of an accident-is-is-onè of the fubjects which I propofe putting fome more queftions to you concerning-concerning wounds, I mean. - Pray, Sir, what is your idea of a wound?
A. My idea of a wound is, that Dr . Luding is wrong in defining a wound to be " a morbid divifion of parts, which in a fate of health ought to be united;" but that wound ought to be defined thus: " Every recent folution of continuity of the softer parts of the body, when attended with a correfponding division of the teguments, may be denominated a wound *."

Eiaim. Faith, Sir, the two definitions, and all the other definitions I have ever heard, are pretty much upon a par. I think you might leave off defining fuch plain matters; the patient will hardly miftake a wound, and if the furgeon knows it only by the definition, his knowledge will not be of much ufe. I believe, Sir, punctured wounds, fuch as are received in battle, are reckoned among the moft dangerous: Pray, Sir, do you approve of dilating fuch wounds?
A. Sir, " fcarifying and dilating wounds was a practice recommended by almoft every writer on the fubject, and which, till of late, prevailed univerfally.-By fcarifying the
fores, it was expected that the floughs, with which they are fometimes covered, would fooner feparate, and that the cure would thereby be haftened. Later experience, however, -fhows,-that this reafoning is fallacious;-and inftead of proving ufeful,-thatifcarifying very commonly does harm: It creates additional pain and inflammation, at the fame time that it evidently extends the furface of the fore, while it does not appear to be productive of any advantage. It fhould therefore be laid altogether afide !!! Even the dilatation of gunfhot wounds, fo much recommended of late, ought to be employed with caution.-When the paffage of a ball is not extenfive, and when the parts through which it has gone can with fafety be laid open,-I believe it would be right in every cafe to do it with freedom from one end of the jinus to the other: - no harm could acrue from IT ; and there is reafon to imagine, as we have obferved above, that ir would tend much to forward the cure:-But $I$ bave never been able to difoover what advantages could probably be derived from the mere dilatation of the external opening of a gunfhot wound: It is propofed with a view to giver a more free difcharge to the matter than it would otherwife have: But in deep narrow wounds, formed by piftol or muiket bullets, increafing the diameter of one part of the finus, will have no effect wbatever upon the reft of it; and as it muft evidently do harm, by enlarging the wound, while no benefit can probably accrue from IT, I do not hefitate in faying that the practice fhould not be continued."

Sir, I cannot pay you any compliment upon your perfpicuity. You began this long harrangue as if you had
defigned to be underftood to fignify that it was your opinion that no narrow wound fhould be dilated. Pray now, Sir, will you have the goodnefs to fay diftinctly, and without circumlocution, what you really do mean? You anfwer, Sir, as if you were inftructing others; pray be fo good as inform us, what you would actually do yourfelf; for I now begin to fufpect fhrewdly, that you do not practife exactly according to the rules you recommend to others; and indeed, if I underftand rightly the general tendency of your anfwers, nothing can be more commendable than to practife in direct oppofition to the rules you profefs. Tell us plainly, how do you really do in cafes of wounds?
A. "In the treatment of punctured wounds, our views ought to be the fame as in cases or sinuses; indeed a wound of this kind is exactly a finus in a recent ftate *."
2. A finus in a recent ftate, Sir! I don't underfand you, and begin to fufpect you are again fpeaking in a manner which has already given confiderable offence. I therefore demand an exprefs anfwer to my queftion, What do you yourfelf do in punctured wounds?
A. "The practice I have long adopted in wounds of this kind is this: When they run in fuch a direction as to prevent a feton from being carried along their whole courfe, I lay them open immediately from one extremity to the otber, or as far as it can be done with fafety, either with a probepointed biftoury, or with a fcalpel and director $t$."
2. Pray, Sir, is this a common practice among furgeons?
A. No, Sir ; but " to thofe not much accuftomed to this

[^34]kind of bufinefs, the enlarging of a fmall puncture, fo as to form an extenfive wound, appears to be unneceffary and cruel : but whoever has feen much of this branch of practice will know, that the greateft diftrefs often arifes from the fmalleft punctures."
2. Then, perhaps, you think this a very proper practice for the army and navy furgeon?
A. Yes, certainly. "In every wound, therefore, of this kind, particularly in thofe which are often received in duels with fmall fwords, and in battles with tbe points of bayonets, the enlargement /bould take place even before the parties are carried from the field; by which many inconveniencies which naturally attend thefe injaries would be prevented."
2. Pray, now, do you ever in your practice carry your fcarifications deeper?
A. Yes, Sir, to the periosteum often; " for it often happens, that in deep wounds, while no inflammation of any importance appears externally, while the PERIOSTEUM is discovered to be much inflamed, and very painful; in this fituation, nothing affords fo much relief as fcarifications made in the inflamed membrane, either with the fhoulder of a lancet, or with the point of a fcalpel *."-" In different cafes I have fcarified the periosteum in the manner here recommended; but when the periosteum is allowed to proceed the length of fuppuration - $\dagger$."

Exam. Suppuration of the perioftcum !!! Sir! !! Why, it feems to me, Sir, that, either by your not underftanding my queftions exactly as I meant them, or by fome other

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accident, we have got a little entangled. Let us, if you pleafe, change the fubject for one more fimple. Pray, Sir, what are piles?
A. "The piles are termed cनece, or Blind; but when they burft, or difcharge blood, they are termed apert, or open *!"
2. What is the moft frequent caufe of piles!
A. " Compreffion produced by hardenbd feges collected in the rectum ; a circumftance which, in constirutions liable to costiveness ! ! ! is very universally met with $\dagger$ !!!

Exam. Sir, I once more requeft, you will give more ferious and becoming anfwers; and confider, Sir, you are not now talking to an individual, but a Society of brethren of the fame profefion with yourfelf. What are the more important caufes of piles?
A. "The preffure produced upon the neighbouring parts-in every case of pregnancy-by the gravid uterus; and, laflly, tumours of whatrver nature they may be, which, from their fituation, prefs upon the hæmorrhoidal veins.-Thus, fchirrous tumorus in the rectum, and fimilar affections in the prostate gland and bladder, are fometimes productive of this effect; and fwellings of the mesenteric glands have likewife been known to comprefs the refluent veffels in their courfe from the rectum $\ddagger$ !!!

Exam. I queftion much, whether any of all thefe causes you have alleged can produce piles-coftivenefs excepted ?

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Can. "Coftivenefs, Sir, has fuch effects upon thefe parts, that, in fome inftances, luxations of the os coxygis have occurred, from large collections of hard feces in the rectum *."

Exam. Why, Sir, really thefe things are fo new, that you are better entitled to examine me, than I to examine you. Perhaps, Sir, you have operations for this too?
A. Not exactly operations; but " whenever tumours in the contiguous parts are found to produce the difeafe, the means of cure muft be directed particularly to the removal of thefe $\dagger$.

Exam. Then, perhaps, the beft way to cure piles radically, according to the lift of caufes you have delivered, would be, to diffect for the mefenteric glands-fore the proftate-cut out the fchirrous rectum-and procure abortion!!!
2. Pray, Sir, what is the difeafe called fiftula in ano?
A. " In confequence of the latitude given to the meaning of the word Fiftula, a great variety of appearances are exhibited under the general denomination of fistula in Perinæo $\ddagger!!!"$

Exam. I meant fiftula in ano.
Can. " Every finous ulcer in the neighbourhood of the rectum is a fiftula in ano: and whoever will confider attentively the different circumftances relating to it will find, that the fistula in ano is of a nature as determinED ! and fixed, as any diforder which falls within the Lrmirs of furgery $\$$."

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2. Do you approve of the practice which once prevailed, of cutting out the entire fiftula?
A. Sir, to take away any confiderable portion of the teguments above the anus, muft always be confidered as formidable ; it would be almoft impoffible for a patient, in fuch circumftances, to retain ftools of a more hould nature. There is fortunately, however,-no good caufe -why any perfon fhould ever be forced into such a disagreeable situation *!!!"

Exam. Are there any other diforders about the rectum but thefe two, the fiftula and piles?
A. Yes, Sir, there is the imperforated anus?

Exam. What is to be done in the firf place with imperforated anus?
A. "Althogh an imperforated anus is not a frequent occurrence ! yet as it is occafionately met with! and as it is of much importance to have fuch deficiences ! foon difcovered, every midwife! ought to examine with attention the fate of all the natural paffages ! as foon as poffible after delivery."
Exam. Aye, that is in the firft place indeed. But pray, Sir, have you ever cut for the imperforated rectum, and tried by incifion to find it?
A. Yes, "I myfelf have had two fuch cafes; in both of which the gut lay deep, and in both I was fortunate enough to form an anus, which for a good many years has continued to anfwer the purpofe surficiently !"
2. And have you had a great deal of difficulty in preferving the opening!"

[^37]A. Yes, Sir, "In each of thefe cafes a great deal of difficulty was experienced in preferving the paffage fufficiently wide and open. Indeed, no cafe I was ever concerned in afforded! fo much trouble and perplexity as was experienced ! from each of thefe $I$ have mentioned *."
2. What would you do when, after feveral deep incifions, you found it impoffible to reach the rectum?
A. "When it unfortunately happens that no paffage is obtained for the feces by any of the means we have pointed out, might not we attempt an opening above the pubes! or perhaps on the right fide, fo as to reach the caput coli, with a view of making an artificial anus in one or other of these places?"

This laft anfwer, both from the ferious tone in which it was delivered, and the amazing abfurdity of the thing, threw the Gollege again into a paroxyfm :-fome were fo tickled with this burlefque upon furgery, and efpecially with the notion of cutting up a little boy's belly in fearch of the Sigmoid flexure, or Caput Coli, to make an anus of it, that they fell into immoderate and hyfterical explofions of laughter; while fome of the ferious, four-looking gentlemen, the elders of the College, did not relifh the humour of it at all.

The examinator turning once more to the candidate, faid to him in a ferious manner, that for certain confiderations, and in refpect to his late refpectable fituation in the College, he was inclined to continue the examination. As for any indignity which he himfelf might feel from the unbecoming conduct of the candidate, he was willing to o-

[^38]verlook it. The candidate fignified his acquiefcence by a fmile and a familiar fort of nod, which was, however, of fo equivocal a nature, that the examinator turned towards the gentleman who was next to examine, whifpered with him for a moment, confulting, as we imagine, whether he thought it decent or becoming to go on; and indeed it plainly appeared that this was the fubject of his converfation by the hefitating and confufed manner in which he recommenced the examination. Turning half towards the candidate, he afked him, Pray, Sir The words Pubis and Caput Coli were on his lips-they rung in every ones ears; and while fome tittered very audibly, others ftretched on tiptoe expecting to hear the fame extraordinary fubject continued; but the examinator, with fingular difcretion and good fenfe, afked quite another fort of que-ftion-Pray, Sir, how do you judge of the fituation of a polypus?
A. "When a polypus is fufpected to have formed in the asophagus, if no part of it protrudes up towards the pharynx ! there will be cause to imagine! that it proceeds Downwards towards the stomach *!"

Exam. So, Sir, if you firt fufpect a polypus, and then do not find that it protrudes upwards, you fufpect again that it protrudes downwards? Pray how do you extirpate it?
A. With a twifted wire paffed through a double canula.

2 How do you manage when you find the patient hauking, and coughing, and fneezing, and
A. I cut his throat.

Exam. Cut his throat, Sir! You are infolent! You intended this from the very firt!

[^39]Cut bis throat! refounded from all corners of the ball. At the very found the members were feen in perturbed motion " like mots in funny ray." They condenfed and thickened towards the centre, fo that the candidate, without doubt, muft have been preffed to death, had not the continual revolution of the atoms of which this black nuclæus was compofed made fome temporary openings in one of the moft fortunate and relaxed moments, the officer pulled the candidate backwards by the fkirts out of the hall; and the object of their refentment being thus happily removed, the hum ceafed, and, like a hive of bees gathering round their queen, the members fat down at the board, arranging themfelves in their refpective places round the Prefident, who made the following moderate and fenfible propofal :-" Gentlemen, We are all very " fenfible of the contemptuous and forward behaviour of " the perfon who has juft been examined. His ignorance is " very palpable, and we can with no propriety receive him. " Confidering the honourable manner in which he flands " connected already with the College, we muft all feel very " unwilling to do any thing which might inflict difgrace up" on him or his relations. I once thought to have rejected " him upon account of his age; but you fee plainly, gentle" men, how impoffible it is to acquit ourfelves in this way *. " The rejection of a member is a very unufual thing. I con" fefs, that fince $I$ have had the honour of fitting in this

* The Prefident manifeftly in this fpeech imitates the manner of the gentleman who fat in the chair of the College of Surgeons at the time of the younger P— H—being examined: Indeed his fpeech feems to be a mere plagiarifm from begianing to end.
" chair, feveral unpleafant things have happened. I beg, " gentlemen, that you will allow me to exert what I con" ceive to be my higheft prerogative ! allow me to interpofe " and moderate your refentment on this occafion; this is " my natural office! Nothing could be fo unpleafant as " any thing of this kind becoming public. Let us call this " gentleman in again, if you pleafe; -let us call him in " again,-and appoint him one more leffon,-wand give him " another opportunity."

The youngeft member was ordered to call in Mr. Bell. When he appeared, the fourth Examinator now addreffed him, and faid in a ferious but gentle tone of voice, that the College had felt very indignant at the manner in which he had prefumed to anfwer the laft queftion. I was furprifed, faid the Candidate, to hear from the adjoining room a good deal of difputation. I have both practifed and written different books on different parts of furgical practice for thirty years, and am not a little furprifed that my chirurgical abilities fhould be called in queftion this day, or that my readmiffion fhould be at all a matter of debate; but, Sir —— The Examinator here interpofed with great mildnefs and fuavity of manners, and informed him that the College had taken particular offence at his laft words, when he faid, that, to relieve the breathing of the patient, he would " cut his throat." His throat, Sir, faid the Candidate ; I faid I would " cut it out ! ! !"

This apology feemed to give univerfal fatisfaction, and was followed with a fort of hum of applaufe. The Examinator then begged that the Candidate would proceed in explaining his operation, which he did in the following manner:
" Ligatures may in general be applied round polypi of the back part of the nofe and throat in the manner we have directed, without much interruption to the breathing; but when they are deeply feated in the afophagus, and on all occafions when the application of the ligature is difficult and tedious! it is proper to fecure an eafy and free refpiration!' during the operation! by previously advising!!! bronchotomy !!! By this no additional risk is incurred, for IT may with eafe and Safety be accomplifhed; and IT puts Ir in our power to finifh the operation more perfectly than we otherwife could po."

Exam. So, Sir, you cut his throat fcientifically ?-I think, Sir, it would have been much more like yourfelf if you had flit up his noftrils, and fplit his nafal bones with a chiffel; that would at once have given him breath, and have enabled you to grapple with the polypus fairly ?
A. Sir, I confefs to you, I have myfelf imagined that before you fuggefted it to me. "WhEN, HOWEvER, polypi have acquired a large fize, the obftruction thereby produced in the noftril is in fome inftances to fucb a degree, that even with this and every other kind of attention, there is no poffibility of inferting the forceps. In fuch circumftances, as a confiderable fpace may be gained by laying the noftril open, it may in fome inftances be proper to divide the cartilaginous part of it by a longitudinal incifion; and, after extracting the tumour, to reunite the divided parts either by adhefive plafters or with a couple of futures *."

Exam. Juft, I fuppofe, Sir, as a boy cuts up the gills of an eel when it has fwallowed his fifhing hook too deep?

[^40]Upon my word, Sir, your furgery is in fo grand a ftyle, that you are fit to operate on the leviathan himfelf,-and could write an admirable parody on certain paffages of Job.-But my proper duty, being the laft of four examinators, is to defire you to tranflate a few fentences of Latin. I am happy, however, in having had it in my power to rectify this flight mifunderfanding.

Allow me firt, Sir, to inquire what your opinion is concerning the wounds of inteftines, as I need not remind you that a certain furgeon has of late ufed great freedom with the old furgeons, and even with fome modern authors on this point?
A. Sir, I have never read the books you allude to, nor ever will : I have laid it down as a rule, not to enter into controverfy ; and as for wounded inteftines, I am ftill of the fame opinion I was before: "I think their opinion is ill founded, who would rather truft to nature for the cure of a small opening in the gut than insert a ligature, in fo much that I would not leave even the smallest opening that could admit either chyle or fæces to pafs without stitching it UP."

Exam. I know, Sir, you difapprove of trufting to nature ! you truft to nothing but ftitches. Pray, do you ufe a couple of ftitches, or how many?
A. A couple of them, Sir! " The flitches fhould be carried completely round the gut; and in order to give as great a chance as poffible of founding, THEY might even co twice round! first, at the edges of the under portion of the gut, and afterwards about an inch beneath, near to where the upper part of it terminates."

The Examinator here handing an old fafhioned book acrofs the table, defired the Candidate to open it where he pleafed, and tranflate a few fentences, which he did accordingly.

Medicus fit eruditus, A phyfician is a rude man-Id eft, That is-Ab omni ruditate liber, Free from all rudenelsHoc impetrat, He is a Captain-Si addi/cit linguas, If he gets the tongues-Ex quibus Latinam cardinalis dicitur, Of which the Latin is cardinally fpoken-Magis debet, He more ought-Scribere, To write-2uam dicere, Than to learnSi non lectum adire poteff, If he cannot go to bed-Tamen per literas confilio inferviat, Neverthelefs, he can read all night.

Miferrima cui femper bene eft. The pooreft furgeon is always hearty-2uando aliis male, In the feafon of fore throats.
Pbarmacopaco non eft concedenda praxis, Let no druggift practife-2uia non intelligit quod pertinet ad genium practicum, For his want of wit would fpoil the trade-Reformatio pharmacopocorum et moderatio taxa, Clever fuccedaneums, and griping charges-Summe neceffaria eft, Are the neceffaries of life-Medici efl, judicare de agri conditione -Take the meafure of your patient's foot-An opus fit, See that he be opulent-An vires ferre poffunt operationes cbirurgicas, And able to pay for operations-Mutatio vaga agrotorum contemnenda eft, Never mind your patient's wandering and changing-Non facile ager eft deferendus, But ftick to him like bird-lime-In beroicis medicainentis adbibendis apud principes, Give heroic medicines to DukesNon temere contradicat principi patienti, Pleafe your beft patients as well as you can-Malum tanto con/pectius in fe,

The cafe is worth attending to-2uanto major eft ille qui agrotat, When a major is wounded-Sint loci communes, Mind the hotels-Sint diaria experimentalia practica, And the newfpapers are not ufelefs in practice.

The Examinator and the whole auditory feemed highly delighted with the tranflations, and faw very plainly that the Candidate was not fo bad a fcholar, but had a fort of dry humour of his own. The Examinator, looking pleafantly in his face, and drawing the fore-finger at the fame time along the page, ftopped it juft under two lines, in the form of verfes, which had caught his eye. The Candidate without further hint tranilated them.

> Accipe dum dolet-
> Poft morbum medicus olet-
> Take while he is in the fit,Or the devil a fee you'll get.

The Examinator feemed particularly amufed, and afked him whether there was not a Scotch proverb as good as the Latin one, and as elegant as the tranflation? The Candidate replied that there was, but he had refrained from giving it, becaufe it was not his own originally, but the faying of an old friend of his now gone.

Tak aye the fee
Whan the tear's i' the ee.
The good humour of every individual was now entirely reftored; and the Examinator thought only of turning up fome paffage of the book which might correfpond with fome of the theories of the Candidate, who now began to
appear much more refpectable in the eyes of all the auditors; and accordingly, after reminding the Candidate very politely of his fingular improvements in fewing up the wounded inteftine, he defired him to turn over to the LXXXVII. Chapter, and there he would probably find fomething that would pleafe him, begging that he would be fo good as read it aloud, and tranflate it, for the amufement of his fellow members. The Candidate, with a gracious wave of his hand, and a fly inclination of his head, as much as to fay, " that he knew what he was going about, and how to go about it," read aloud the following paffage of Albucafis.
" Accipias formicas magnorum capitum. Deinde aggrega duo labia vulneris, et pone formicam unam ex eis quæ habeant os apertum fuper duo labia vulneris. Cum ergo capit fuper ea, et ftringit os fuum, abfcinde caput ejus, adhæret enim, et non folvit. Deinde pone formicam aliam prope primam, et non ceffes facere illud cum formica poft formicam fecundum quantitatem vulneris totius. Deinde reduc ipfum, et fue vulnus. Illa enim capita remanent annexa in inteftino, donec cibetur inteftinum, et fanetur, et non accidat infirmo nocumentum penitus. Et eft ifte modus future cum formicis et inteftino, non eft nifi fecundam viam fiduciæ et fpei."
" Accipias formice magnorum capitum, Take a quantity of big-headed ants-Deinde aggrega duo labia vulneris, Then lay the two lips of the wound nicely together-Et pone formicam unam ex eis qua babeant os apertum, And take up the ant which you obferve gaping wideft-Super duo labia vulneris, Laying it to the two edges of the wound-Cum
ergo capit fuper ea, et firingit os fium, And when he bites and clinches his jaws-Abfcinde caput ejus, adberit enim, et non folvit, Cut off his head, for it will ftick and not come away-Deinde pone formicam aliam prope primam, Then clap another ant near the firf-Et non ceffes facere illud cum formica poft formicam, And fo go on fixing ant after ant-Secundam quantitatem totius vulneris, Along the whole length of the wound-Deinde reduc ipfum, et fue vulnus, And fo thruft back the gut, and few the belly-Illa enim capita remanent annexa in inteflino, For the heads ftick to the gut-Donec cibetus inteftinum, Till the gut be foldered again-Et non accidat infirmo nocumentum penitus, And the fick man is as found as a bell-Et eft ifte modus futura cum formicis et intefino, non eft niji fecundam viam fiducia et ßpei, And that is the way of sewing gutts with ants heads a future of good likelihood and promife."

The Candidate was now paffed along to the Prefident at the head of the table, who, in his official capacity, went through the ufual ceremony of fhaking him by the hand, which is the act of initiation, and, like the mafon's grip, is the infallible fign of conftant fellow-feeling, brotherhood, and profefional faith; from whom he was handed, in the true efprit du corps, dancing the boulangée round the table, from hand to hand, till having finifhed his circle, he was feated next the Prefident with particular marks of diftinction.

## CONGRATULATION *.

## COLLEGIUM CHIRURGORUM

Literatura et experientia proba inftitutione et multis peregrinationibus exteris celeberrimus.

I did, in my firft Number, congratulate you upon having among you a member fo well able to fupport the dignity of your fcience; and now I give you joy of a member whom I have proved to be fo deeply interefted in maintaining the interefts of your trade! one who has combined numbers in its fupport, by the fureft of all bonds ! by certain perplexed and indefinable interefts, which politicians call mutual facilities, and mutual reciprocities; who has demonftrated, that calculations which feemed to defy arithmetic and algebra, " and the plus and minus which brings

* I have every reafon to believe, from the peculiar merits of the work, and the uncommon induftry of my friends, that my firt Number is out of print. Whether this be the cafe, or whether it be that it has fallen a victim to fome of the various fatalities which its puny race is expofed to, I am advifed by my friends to reprint the moft valuable paffages of it , and efpecially thofe which are neceflary to the underfanding of this fecond Number. The Proclamations, Fables, and Conclusions, are the pieces which I myfelf admired moft, and my friends indeed flattered me upon them not a little. The following Congratulation, addreffed to Mr . John Bell, is the pattern after which I have cut the congratulation upon the re-admiffion of Mr. Benjamin Bell :-
"We fball conclude with congratulating the Royal College of Surgeons " in Edinburgh, uron the luftre which this noble difplay of our author's
philofophers out of their difficulties *," may be refolved without jealoufies, fufpicions, murmurings, or the flighteft difcontent ; who hath demonftrated, that if fcience requires a head, trade requires only horfes and heels; who hath fo parcelled out the people, and divided his favours in the houfe of Gotham, that none need defpair of obtaining promotion, affociation fraternity in his turn, and the bleffing of daily bread to keep him ftrong for labour ; who hath demonftrated, moreover, for the comfort of thofe brethren who are weak in fpirit, that if wifdom be required, it is of that kind " which giveth fubtilty to the fimple, to the young man knowledge and difcretion."
" learning and wifdom will reflect upon it. How highly will its
" name be refpected abroad! How fuperior wist it appear when com" pared with the great fchools in other countries! Foreigners will "doubtlefs conclude, that the other members of that body are not much " inferior in anatomical, and more efpecially in chemical knowledge, " to our illustrious author. He alone has known propraly how to " preserve! and to kecp up! its dignity! He alone! has known! proper" ly how to appropriate the difcoveries of others. And fhould any " grumbling individoal dare to complain, he knows ! how to reduce bim "to filence, by telling him ! that the conftitution of the Royal College of
" Surgeons gives to every one high privileges in fpeaking."

[^41]$\square$
TRUE AND WONDERFUL DISCOVERY
of A

## UNIVERSAL LANGUAGE.

"In many words there is folly."
$\mathrm{I}_{\mathrm{T}}$ is well known that there was a time when a great pros phet proclaimed a judgment upon this land for the heinous and crying fin of punning; but of late a more griévous misfortune hath befallen many kingdoms of Europe in the inordinate growth of ideas and words ; whence come murmurings, plotting, and revolutions-new manners, new morals, and new religions-new divinities, and new Sab-baths-new marriages, new burials, new divifions of time, new notions of eternity,-which innovations, all fo dangerous to the public weal, proceed plainly from this inordinate growth of words, which have increafed, are increafing, and ought to be diminifhed. For this dangerous and growing evil have I, with infinite diligence, by a fort of philological digeftion, diftilled from the volumes of my favourite author an infallible cure-as heretofore thofe who

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 WHAT DO YOU READ, MY LORD ?loved truly the Spagyric Art-and cleaved unto Paracel-fus-" did extract drugs of fingular efficacy from the dung of man and other beafts, fpittle, urine, flies, mice, the hooves of goats and affes-and the afhes of an owl's brain *."

In the difcovery of a univerfal language, it were much to be defired that there fhould be few words, and that thefe fhould be expreffed by few figns; in order that the ideas being thus reduced in number, and fimply expreffed, might become commontoall nations.-In this great philofophical fpeculation no one has excelled our favourite author-nor hath there been any thing, I will venture to fay, fo perfect as his new language, nor fo likely to be of profit to the world, fince the day of the confufion of Babel.

The Chinefe, who certainly efcaped firft from that fcene of difmay, wandered eaftward as far as the Yellow Sea would allow them-and as they travelled along night and day through ftrange places, with their children on their backs, they made a paction, that no one fhould utter more than one found at a time, and that as Mort as pof-fible-and this act of mere terror in a fet of wanderers is the real caufe of immeafurable greatnefs and power of the Chinefe Empire.

There was no pillar of fire to guide them, and they travelled on in darknefs and filence. The firf difmal night they fooke never one word, great nor fmall; but, in the morning, they tied their fandals on their feet, and their

[^42]babes on their backs, and travelled ftraight onwards. The fecond day, the women, no longer able to bear the double burden of the children and their own filence, affembled in a great plain-and, while the men finihed the fmall quantity of wine that remained, the women regaled themfelves with talking, in which they indulged to fuch excefs, that the wifer and more elderly among them, (reminded by this din of the difafter which had happened no more than two days before), propofed, " that no word fhould exceed one fyllable in length"-and they alfo agreed (as was moft natural in an affembly of women), "that each word fhould have at leaft one vowel;" whence the Euphonia, the foftnefs and delicacy of the Chinefe, and of all eaftern languages.

It is well known that as eafily might we teach a man to write without hands as to reafon without a reafoning language; and it is plain, from the origin of the Chinefe tongue, invented by women, not growing up flowly like other languages, which, as Horace obferves, vegetate, and grow, and bud, and flourih, and drop their leaves like⿶ trees, but, organized at once! why the Chinefe have continued ftationary ever fince in refpect of fciences and arts. No civil wars, no outrages, no murders, no revolutions difturb the vigorous fleep of that mighty empire, which grows and grows, but never changes. The great charm which perpetuates this lethargy is the language, which is monofyllabic;-a man utters fyllable after fyllable, and word after word, and creeps on with o's, and a's, and oaw's, like cats crawling from tile to tile on the houfe tops; -he crawls along from fyllables to words, from
words to fentences, and, with the help of a few flourifhes of his finger in the air to explain his au's-and oaw's-he can fpeak almoft any thing.

This fingular conftruction of the language preferves the Chinefe in that compofed and orderly ftate of mind, in that perfect apathy and tranquillity which makes him a right integral part of the empire. The flow, perpetual evacuation of words prevents any fermentation of mind; as well might you expect a fquib to blow up a caftle, as the ideas of a Chinefe to be condenfed into any intellectual explofion. The flow enunciation of fyllable after fyllable, prevents the germination of genius, and checks the fermentation of hot blood and ill humours ! In China there is no curfing, fwearing, blafpheming, preaching, haranguing, gibing, jeering, quarrelling, affembling, aflociating, organizing and revolutionizing. This jimitation of words hath abridged their ideas; the limitation of ideas hath abridged their intellectual powers; the abridging their intellectual powers hath made them a great people : and this being fuddenly achieved by this fole difcovery in language, they were as great a people three thoufand years ago, as they are at this day.

This is a full and true account of the rife and prefent greatnefs of the Chinefe empire; and well were it for mankind, if we could as plainly difcover how other empires grow little, as how this one hath grown fo great.

The author of a fyftem of furgery is Emperor over dominions of his own creating; whofe fafety and happinefs confifts in filence and eternal fleep. His chapters are provinces; his operations battles; his theories are the religion of his fub.
jeets. Quotations are but petty infurrections, which he enters upon the records of the empire, only becaufe they are fubdued. His opinions are the public faith. His feat is high among the barren mountains of Tartary, but his image he fetteth up at the gates of the empire, that his fubjects may fall down and worhip; that they may remember, as they travel through the provinces and highways, that all vifible things are but emanations of his wifdom. The language of his dominions is fimple as the o's and oaw's of the Chinefe Empire ; his circumvallations, are folid and extentenfive as the wall of China; and his ports are for ever fhut againft all invafions of knowledge.

Our author, born in a barbarous and ignorant age, feeling, like Zenzis-Kan, the fuperior influence of his own afpiring mind, and not unconfcious of the univerfal empire for which he was deftined, began early in life to cultivate philofophy and letters, and to lay fure the foundations of his future greatnefs. He had rẹmarked how much arts prevail over arms, how a polifhed people have always fubdued the favage hordes by whom they had been conquered. And greatly did he fet his heart upon this difcovery of a univerfal language, where a few ideas might be reprefented by a few eafy figns. His younger days, aye, and nights alfo, did he fpend in ftudying the Categories of Arittotle, and the Univerfal Philofophy, and Tranfeendental Metaphyficalconceptions of Bifhop Wilkins. For well had he confidered, " that the right ordering of the tranfcendentals is a thing of no fmall difficulty;" and the philology of the Chinefe miflionaries did he not defpife.

Yet wanted he not penetration to difcern the fatality both of individuals and of nations, in embarking upon a boundlefs fea of Predicaments and Generals. He perceived, by an intuitive glance, that there was but one way to univerfal empire over mind and language. He firt obferved how much the human faculties might be limited, and ideas abridged, by operating upon language ; towards the retrenching ideas, he gathered in the words, tied them up in bunches; the ufelefs ones he threw entirely afide, and preferved only the radicals, and the conjunctives.

It cannot be denied, fays Bifhop Wilkins, "that a variety of words is an appendage to the curfe of Babel, namely , the multitude and variety of languages." This great and univerfal defect which Wilkins could only lament, hath been entirely done away by our author. His volumes are one continued demonftration of the art of difcovering by conjecture-of reafoning without facts-and of writing without words.

There is a fort of enthufiafm which one is apt to be infected with when praifing a favourite author ; but I declare upon the word of a faithful philologitt and critic, I have found no more than thirty words in the eight Octavo Volumes, Radicals, Conjunctives, and all : had I difcovered more, I fhould moft affuredly (however derogatory to the abilities of my favourite author) have declared the truth. On the contrary, I will undertake to prove, that any one who will ftudy this author and his ftyle with due diligence, fhall be able to write a volume (and that is equiva-

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lent to writing eight volumes) with the help of thirty-four words, great and fmall; in fhort, that he fhall perform his piece with no greater number of notes than there are of keys in a piano-forte (that is a piano forte of four octaves, with the additional keys), the radicals ftanding for the full notes, and the conjunctives or-but-and -however-IT-IT-for the femitones.

One thing is particularly to be remarked, concerning the radicals of this fhort and univerfal language, That they have a wonderful aptitude to cohere in couples and leefhes; but when you try to run them together into any more inti: mate connection, you find, to ufe the metaphor of the French academician, that the materials of your ointment will not mix. You may, indeed, bind them together with couplatives and conjunctives more or lefs forcible; but, do what you will, the radicals ftick up as fairly as the fpikes of an iron rail. You may run your eye along the points of thefe radicals, and count till you turn giddy, but you can make out no more difference betwixt radical and radical than you could mark in the brafs nails which adorn your eafy chair.

And there is another thing very remarkable, that, either in analyfing this language, or in ufing it, you have no occafion to be particular in diftinguifhing nouns from accidents. This is a mere democracy of words, where all are on a perfect equality ; and moft of them Sans-Cullotifh. They obey none of the laws of Grammar, neither philofophical nor natural; but every word flands up for itfelf. Their congrefs is not after the manner of the vulgar copula of grame-
marians: they unite by modes peculiar to the language they belong to-tautologically, hyperbolically, redupli-catively-congruoufly, incongruoufly, fynonymoufly,with all unufual and unexpected modes of inflection, connection, contortion, concatenation, amplification, and abreviation:-There is every thing in their arrangement that can be efteemed pleafing or wonderful: They amufe the eye exceedingly, fometimes/running together like quick-filver, and at other times you fee them feparating like water and oil, notwithftanding the moft furious and unremitting agitations and fhakings of the operator.

Radical Words.

The radicals, by which the nature, caufe, cure, and termination of fome formidable difeafe may be explained, are fuch as follow :

Induced-incurred-fupported- terminated- general nature-particular caufes-terminating in terminationsoccurring of occurrences-fources of uneafinefs-proftration of frength-frequent applications-applications of preffure-productive of advantage-caufes of failure-certainty of fuccefs-having recourfe to operations-remedies put in practice-fubfequent fymptoms-inclination to aggravate, and tendency to augment-producing changes -obviating accidents-and effectuating ends.-In fhort, with thefe radicals only the difeafe is defcribed, the opera-
sion performed-the affection cured-the operator praifed -and the whole affair finilhed-with the help only of a few vulgar couplatives, as-the-for-perhaps-however -and IT IT.

## Bunches of Radicals.

Induced.-Inducing fymptoms-inducing difeafe-in. ducing hemorrhagy-inducing fever-inducing fuppura-tion-inducing gangrene-inducing authors-inducing practitioners-inducing others-inducing me-inducing me to obferve-inducing accidents-producing accidents -producing destruction-producing decay.

Tending.-Tending to induce-tending to indicatetending to difeafe-tending to inflammation-tending to gangrene-tending to increafe-tending to decreafetending to affift-tending to prevent-tending to curetending to deftroy-tending upwards-tending downwards -tending to open-tending to clofe-tending to promote -tending to augment-tending to deflroy the interefts, \&c.

Recourse to.-Have recourfe to bleeding-have recourfe to purging-have recourfe to vomiting, and have recourfe to blifters, and have recourfe to glytters,-have recourfe to inftruments-and have recourfe to various in-ftruments-and have recourfe to operations-and have recourfe to various operations-and have recourfe to advice, and have recourfe to a furgeon, and have recourfe to a /kilful furgeon-and, have recourfe to every tbing that can promote, \&c.

With a view to.-With a view to comprefling-with

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## BUNCHES OF RADICALS.

a view to relieving-with a view to interpofing-with a view to uniting-with a view to feparating-with a view to preventing-with a view to curing-with a view to ac-complifhing-with a view to obtaining-with a view to tbis, with a view to that-with a view to every thing.

Becomes.-Becomes greater-becomes fmaller-becomes painful-becomes eafy -becomes fmooth-becomes pale-becomes exhaufted-becomes indifferent-becomes important-becomes dull-becomes needlefs-becomes ufelefs-becomes fuperfluous-becomes foft-becomes eafy -becomes pliant-becomes-wbat you will.
Effectuate. - To effectuate the obliteration of cavities -to effectuate the evacution of blood-to effectuate the extirpation of tumours-to effectuate the cure of difeafes -to effectuate the reduction of hernias-to effectuate the repofition of bones-to effectuate the deftruction of tumours -to effectuate the ftoppage of arteries-to effectuate the reunion of fores-to effectuate the purpofes of futures-to effectuate all our purpofes.

Various.-Various difeafes-various facts-various oc-currences-various occafions-various kinds-various forts various affections-various methods-various operations put in practice, and remedies put in practice, and trials put in praclice, and poftures put in practice-and methods put in practice-and endeavours put in practice, and various methods and means put in practice-and theories put in practice, and recommendations put in practice-and every endeavour, and contrivance, and invention put in practice to accomplifs certain ends.

Incurred.-The rifks incurred, and the riks incurred,
aye, and the risks incurred, and the trouble incurred, and the difadvantages incurred, and the inconveniencies incurred, and the pain incurred, and the dangers incurred-the mijchiefs incurred, and the criticijms incurred.

In general.-Difeafes in general-fymptoms in general -bodies in general-hard bodies in general-foreign bodies in general-hernias in general-buboes in generalcollections in general-blood in general-operations in ge-neral-hemorrhages in general-evacuations in generalfurgeons in general, and every thing in general.

Particular.-Particular inventions, and particular con-trivances-particular remedies, and particular operationsparticular means, and particular methods-particular pofitions and particular poftures-particular practitionersparticular theories, particular ideas.

Rendered.-Rendered eafy-rendered certain-rendered obvious-rendered uncertain-rendered painful-rendered pleafant-rendered unnecefiary-rendered ufelefs.

Different.-Different difeafes and different cafes_different occafions, and different accidents, and different timesdifferent practitioners, and different furgeons-different remedies, and different cures, and different operations-different writers and different authors-different treatifes, and different books-different times and different ways, and different occafions-different modes and different mannersdifferent arguments and different reafons-different bleed-ings-different tumours, and different collections in different parts of the body, and different people have written on different parts of my works-This is probably the divers ways-and divers men of holy writ.

Application.-Application of heat-application of cold -application of preffure-application of cupping glaffesapplication of thofe animals called leeches-application of inftruments-application of hands-application of bands and fingers-and leeches are advifed, and bleeding is advif-ed-and the application of preffure is advifed-and practitioners are advijed, and in page 140, the practitioner's tbumb is advifed.
However.-However it happens-it happens however -it often happens however-it always happens howeverit commonly happens however-that bappens is, as it were, the shadow to bowever-for may however, and this however, and that however, and all however-we differ however-the cafe however-the circumftances however -the different circumftances of cafes, however-and authors however-and many, however-and all, howeverand I myfelf, bowever.

Occurrences.-Daily occurrences, and dangerous oc-currences,-and uncertain occurrences-and accidental occurrences, and frequent occurrences, and rare occurrences -and various occurrences-and every occurrence, and all occurrences.

The fentences in this mode of writing are in general rendered perfect when the autbor bas recourfe to all thefe various words for effectuating his different purpofes of ex-planation-but I am induced to believe, that his compofition is mofl perfect in general, or tending to the utmofl perfection, bowever, when this word occurrence recurs moft frequently , for we may, from the frequency of its recurrence, venture to pronounce it to be what Bifhop Wilkins calls the

Tranicendental, or, as Burke would fay, the Lord of the Dominant.

Thefe are the chief radicals, which he who would learn the language muft recite with inceffant diligence; for though one toffes them down at random, like counters, one is fenfible how very nearly the accidental combinations of them approach to the found at leaft of a rational difcourfe, how different the found is from any thing one has heard before, and how impoffible it would be to degrade this language to the tone of ordinary compofition.

## Example.

" Thus, it rarely happens, however, that any difficulty is " obtained in occurrences of this kind; for when it occurs, " as no doubt it will do fometimes to the beft and moft " perfect practitioners, the circumftance is to be treated " like other occurrences of the fame general nature; " whence it often happens, by means of the inferior ex" tremity terminating in it, indeed it by the general appli" cation of preffure is-terminating fatally may frequently " be guarded againft, you may be thereby rendered cer" tain of fuccefs, for the inconveniencies which fuch oc" currences are fure fooner or later to induce, \&c."

I have here, for the amufement of my reader, thrown down thefe radicals at a venture. Thefe glorious conftellations of words are like light fhining through a vacuum, without any folid body to reflect the rays. They want only a fubject to arrange themfelves round, to fall into a moft harmonic order. Nothing of the acute reafoning or fine wit of the author is perceived in this ae-
cidental grouping of the radicals; there is nothing but the mere found of the language. Yet even the barren found will give pleafure to thofe who have ftudied the author, and who remember the inftruction and amufement which thofe very words are wont to convey, to hear the very found is infpiring, and is enough to make a true admirer caper with delight-Ban-ban-Caliban-he be mafter, I be man,-ban ban.-

## Of the Copula.

Next come we to the copula, the particles which join the radicals together; which particles modern grammarians, with more wit, and confequently with lefs fenfe and erudition than the ancients, have thought fit to degrade with various unfeemly and fantaftic comparifons, faying, that they are the Turpentine which helps to mix the oil, wax, and Galbanum of our ointments *. Thefe particles (fay grammarians) are the Pitch, the Lime, the Glue, the Mortar, with which we plafter the radicals, fo as to make them cohere. They are the ftitches with which we flitch our rags and patches together. They are the Nails, Pegs, Hooks, Bolts, Dove-tails and Rabbittings with which our work is joined. The particles, yet-and-but-and Ir -1T- are thofe in which our author chiefly delights, and the firmnefs of the nexus, which he makes with the help of thofe very fimple bolts, is inconceivable! this is obfervable even when he is uf-

[^43]ing radicals which have no natural relation to each other, nor any aptitude to cohere; indeed the lefs aptitude the radicals have to cohere, the more do we perceive the force and power of the grammarian in joining them.

## Example.

" Yet-when one fubject is naturally connected with another, I fhall not anywhere attempt to feparate them !!! AND-when the defcription of any operation can be more eafily underftood from what I have faid concerning anotber, I fhall confider them in immediate fucceffion ! !! Bur-in other inftances, when no connection can be traced between the different articles treated!!! of-No methodical arrangement can be with advantage attempted *."

Perhaps no perfon has a perfect conception of the ftability of our author's manner of joining his words, except myfelf. He builds fronger than the fhip-wright, the carpenter, or the mafon. I have tried his circumvallations with all kinds of pioneering tools. I have ftood a whole day driving my points of admiration and interrogation!!! like chiffels into every chink, and have not been able to make a hole big enough to let in my hand. I have made no more impreffion, by Heavens, than if I had been digging at the rock of Trichinopoly. His circumvallations are not only as I have faid, as long as the Chinefe wall, but as lofty as the Tower of Babel, and as hard as a Metalliferous Mountain ! and $I$ am at laft come to a conviction, that there is no other way of making the fmalleft impreffion upon them, than by blowing the trumpets feven times round them ! as heretofore againft Jericho.

[^44]Poets of genius have often been admired for their happy talent of expreffing motion by the rythm and found of their verfes, as flying, creeping, rumbling, grumbling, failing, riding! but I do not recollect that I ever faw any reprefentation of a fhip riding at anchor.

## Example.

" By fome we are led to conclude that Polypi are always of a doubtful nature with refpect to the event or-termination of them !!! That for the moft part they are even of a dangerous nature, and therefore that we ought to confider every perfon in whom they occur as in a hazardous flate [1! whilft others affert, that although they may occafionally be productive of fome inconvenience !!! Yet that they are very rarely attended with any kind of rifk -Some, again, are fo extremely timid, \&c. \&c. *"

Often have I heard it obferved, and felt it too, that one is more feverely fea-fick, when the fhip lies at anchor, than while fhe is running at the rate of fourteen knots an hour ; but never did I feel the fenfation fo diftinctly in my head, ftomach, Hyppochondria and Midriff, fo as in reading this paffage. But our author does not always bob like a fhip's buoy, nor rock like a hobby-horfe, in this manner. He often manifefts both the fpeed and wind of a race-horfe, indeed I will venture to match him in long breath with any of the heroes who dived for the p -fs p -t in Fleet-ditch. Of this I will venture to deliver one fmall fpecimen, chiefly with the defign of demonftrating to Mr . Bell junior how eafily he may abridge three or four pages into as many

[^45]lines, and partly for the fake of trying a few more of my fharp tools, my chiffels, my points of admiration !!! for if I can do nothing with them in this laft impetus, I am refolved that I will leave them buried among the rubbifh.

> "I willingly his tafte to each allow ;
> "Well, faid the dame, I ween who kifs'd her cow."
" It does not appear, therefore, that the caufes ufually fup" pofed to be moft productive of carious teeth have much " effect !!! nor do we know of any incidental occurrence to " which in particular this affection can be attributed: From " all the obfervation I have been able to make upon it, I " think we ought rather to confider ir as depending for the " mof part upon fome general conftitutional caufe; upon " fome tendency in the fyftem to produce a wafling or decar " of this particular part. The caufe of this again I fhall not " pretend to explain; but I think it perbaps equally pro" bable that this rotting of the teeth we are now confidering, " depends upon fome general affection of the fyftem, as that " pain in the gout originates from fome general caufe. In" fances no doubt fometimes happen, of teeth becoming cari" ous evidently from fome particular occafional caufe, and " efpecially from external violence breaking! or cracking! the " enamel. This, however, is not a common occurrence: in" deed Ir is very rarely met with when compared with the " frequency of carious teeth; a disease which in moft in" flances begins without any evident caufe, and which in ge" neral has fubffited for fome time before being noticed.
" But allowing that the opinion we have offered upon " this point were admitted, it may be afked, To what purpofe
" will it tend? ?!! Will it !!! fuggeft any difference in " the treatment of the diforder? I think ir-will! !!! As
" the pain of the toothach creates much impatience I! and " is with difficulty fubmitted to, IF the affected tooth is cari" ous, it is in general not only the defire of the patient, but " the earne/t advice of Practitioners, to have ir extracted, " as being the moft certain means of obtaining relief. In " violent degrees of toothach, when the other remedies !!! " ufually employed !!! are found to fall, extraction of the " difeafed tooth ought certainly то ве advifed !! and-in " fuch circumffances no perfon can be more clearly of this " opinion than I am !!! but I am equally clear, that, in com" mon practice, tbis is carried too far, and that many teeth " are pulled daily which ought not to be touched. In moft " inftances, the pain will be removed immediately on the dif. " eafed tooth being extracted: but it very commonly happens " that the relief thus obtained is only temporary, and that the " caries foon fixes upon fome other tooth, which in a fhort " time becomes as much difeafed as the fir $\ell$; and this being
" likewife remoued, the diforder often proceeds from one to an" otber, till fcarcely any are left !!! I have met with various
" instances of this, where almoft the wbole teeth have been
" fucceffively taken out, one becoming carious foon after the
" removal of another. Nor!!! is there even at laft !!! any " advantage gained by the practice; for, after all the teetb " are taken out, thè pain in many cafes remains equally fe" vere in the jaw itfelf. (Guillotine him then.)
" The fiequent occurrence of cafes!!! (not cafes of " teeth) but cafes of this kind tends much to eftablifb
" the opinion of carious teeth being often a conftitu" tional difeafe; and IT likewife fuggefts the propriety
" of lefs frequent extraction than wbat!!! in common " practice is found to prevail!!!! As we can never at firft be " certain whether the diforder depends upon a general caufe " of this nature or not, it is perhaps right in every cafe to ex" tract the firft, and EVEN the fecond tooth !!! that becomes af" fected, as foon as the violence of pain renders it neceffa" ry !!! but whenever the difpofition is fo ftrongly fixed in " the habit that a third or a fourth are foon obferved to be " difeafed, the patient /bould be always advifed rather to fub" mit to a good deal of diftrefs tban to extract any more !!! " and it often bappens, when he has refolution to fubmit to " one fit of the toothach, and to wait till it is completely " over !!! that he never afterwards, in this tooth at leaft, " feels any return of it !!! CASES no doubt occur ! in which " this does not succeed !!! but it anfwers often enough to " warrant the propriety of giving it a fair trial! in perbaps " every inftance! Even where it fails, there is no harm done " by the trials !
" And when it is found to fucceed!
" 'The advantage gained by it is great indeed!
" For a confiderable time, I adopted the common practice
" on this point in its full extent! ! Every carious тоотн !!! at-
" tended with pain I advijed to be pulled!!!! but finding in ge-
" neral that no advantage was derived from $i$, the refult be" ing for the moft part!' nearly as I have already defcribed!!!
" I was hence induced to attempt a different method; and " now, after a patient has had tw or three teeth extracted, " if the difeafe fill continues to return, I never admife the " practice to be pu/bed farther, unless when the pain is fa " very fevere as to render ir abfolutely neceflary, which is " not bowever often the cass !:! By avoiding expofure to
" cold during the $f i$, and by exhibiting dofes of laudanum " proportioned to the degree of pain, the diftrefs produced BX " $i t$ is at laft in general removed; and by due attention to " cleanlinefs, particularly by frequently wafhing the mouth " with cold water, and, when practicable, by! ftuffing the " opening in the carious tooth, fo as to prevent the air from " finding access to it !!! many have been faved, not only " from the pain and diftrefs of pulling thefe teeth which be" came firf affected, but of lofing others, which in all proba" bility would have become carious if the common practice " bad been followed of extracting every difeafed tooth as foon " as it becomes in any degree painful !!!!!
" Having thus endeavoured to flow that carious or fpoil. " ed teeth are moft frequently produced by fome general " conftitutional caufe !!! we fhall now proceed to confider " more particularly the means to be employed, not only for " preventing, but for removing toothach depending upon " this caufe !!! \&c *."
"That ever this fhould have fewer words than a parrot-
" and yet the fon of a woman."
We have proved the importance of this difcovery to the learned world; and our author's title to it is beyond difpute. It only remains that we fhould recommend thefe precious volumes in the words of our firft Number, " to every intelli" gent and afpiring young man, who wifhes to be at once a" ftonifhed and improved," for in proportion to his intelligence will his improvement be, " and there let him contemplate " and admire, and gather, and adorn his brows with the moft " fragrant rofes of fcience, and fatiate his appetites with its

[^46]" moft delicious fweets *;" only let him beware not to eat too freely of the radicals, the infane root which takes the reafon captive, for the derangement of ideas which might follow, is not to be rifked. By exceeding he might come at laft to rave about, " adorning his brows," and " rofes of fcience," and " delicious fweats."

It is well known, that in the great fire of London the book of Bifhop Wilkins on Univerfal Language was all burned in the printing office, to the great grief of that right reverend prelate ; and it is equally well known, how on that occafion the hall of the Royal Society was hung with black baize. Should any accident befal thofe books of yours which we have revifed fo carefully, there is much reafon to believe. that the Royal College of Surgeons would put an Efcutcheon on their ball, with the duck's heads, fculls, hour glaf fes, and other emblems of mortality; the members would march in proceffion long and mournful, to fee your works quietly inurned in the gloomy vault of the Capuletsand the undertakers, whofe bufinefs it is to mourn, albeit they have no feeling of their trade, would not, on this occafion, be infenfible to the general grief.

* Vide No. I. page 66.


## CONCLUSION.

Addrefled to Benjamin Bell, Efquire, Fellow of the Royal College of Surgeons.

Go not forth hattily to ftrive left thou know not what to do in the end thereof-when thy neighbour hath put thee to fhame.

My tafk is done. What muft you feel, when I myfelf turn from it with difguft. To you, whofe confcience is not eafily moved, I will yet addrefs a few words more, and perhaps thofe things which have hitherto offended your ear only, may fink a little deeper. The apologies which I owe, I owe to the public, not to you. I lament the language I have been fometimes betrayed into; indeed I might have chofen the leaft offenfive, for none could have expreffed the contempt which your fentiments, your conduct, and your writings have infpired.

Without the learning of a fcholar, or the far nobler privilege of a genius, you found writing neceffary to your fuccefs; you have taught your profeffion, without learning it; you have fnatched at a kind of fame, which you have not abilities to fupport; you have feized a moment when there was no refpectable book in furgery ! and have fupplied the want with fuch compilations as have been coldly received for lack of better; you have made writing a fort of handicraft; and our fcience, ever honoured till now, you
have converted into a trade; you have fucceeded beyond what almoftany man could defire, and far beyond what you can deferve; for thefe many years you have enjoyed the greateft of all bleffings, the refpect of your fellow citizens; they have beftowed it fo freely, that if you ever lofe theit good opinion, you muft be fupremely unworthy, -and fupremely unhappy, if unhappinefs of this kind can reach an unfeeling heart.

God forbid that I fhould mifconftrue your actions. I am almoft afraid at what I have faid. He is a bad man who thinks thus of another without reluctance. Yet there is in fome men a curious and anxious obliquity of conduct, which, like the gliding of the ferpent, leads the eye along through all the wily mazes. Your advertifements-your prefaces-your politics-your books-your combinations in trade-your rapacious purfuit of fortune, proclaim a mind infpired by no love of fcience, warmed by no generous feeling towards younger men ftruggling for life among the waters.

In one thing only am I deceived. I would once have defcribed you in the words of our Arch-Traitor Logan, " A man who would never help his friend, nor hurt his foe ;" but the affaffin has concealed his name, and faved your reputation.

If thefe books, which I have feverely reviewed, be really ufeful, well compofed, full of the true doctrines of furgery, my criticifms will be difregarded-and every arrow I have drawn againft you will drop harmlefs. But there is a kind of criticifm from which no book is fafe; if I have been guilty of injuftice, I fhould be forry for it.-I
am indeed forry that you and I are not on more equal terms. - Should my name ever become equal to yours, I fhall not fail to difclofe it ; but to declare it now would only add one pang more to thofe you have already fuffered, I mean the cruel reflection of having been rudely criticifed by one far beneath your notice;-to you this blazon would bring no comfort; -and I have on my part fo little to lofe, that the difclofing my name could not even be received as a token of courage.

I have but given you page for page-fable for fableproclamation for proclamation,- and yet I fear that nothing would wipe out the fain of having written an anonymous pamphlet.-A thirft for revenge would but aggravate the offence which fenfibility for an injured friend could hardly palliate.


Farewell.


[^0]:    - Vide No. I.

[^1]:    - Vide No. I.

[^2]:    *Vide No. I.

[^3]:    * Vide Number I.
    + Vide Number I.

[^4]:    * Vide Seal of Caufe.

[^5]:    $\dagger$ Vide Seal of Caufe.

[^6]:    * "The phlegm, in many parts of Germany, has acquired fome reputation, particularly in taking blood from the jugular vein: But there are various objections to the ufe of this inftrument, which muft undoubtedly prevent it from ever coming into general ufe; and thefe particularly are, that we are obliged, from the nature of the infrument, to regulate the deepnefs to which ir is to go, before it is applied: Now we know well, that in bloodletting this is a circumftance we are never by any means certain of; for we frequently, after the introduction of a lancet, find it neceffary to go much deeper than was at firf expected; fo that, when a phlegm is ufed, unlefs we employ one on every occafion of a length which cannot be frequently required, we muft often meet with difappointments.
    " But the moft material objection to this inftrument is, that where there are arteries or other parts lying below the veins! and in any danger of being hurt by the operation of blood-letting, the rifk is much greater with the phlegm than with the lancet.

[^7]:    * " But the material circumftance to be kept in view, is the direction of " the point of the lancet after it has got fairly into the vein. By almoft " every author who has wrote upon blood-letting, fo foon as the lancet is " known to have got into the vein, in order to extend the orifice to a fuf" cient length, we are directed, very properly, to carry the inftrument for" ward. But in what manner are we defired to do fo ?"

    After three pages more about the imminent dangers of raifing up the heel of the lancet, we have the following beautiful conclufion: "So that if ei" ther an artery, nerve, or tendon, lie contiguous, they muft of neceffity " be wounded; and I am perfectly convineed, that this caufe alone has " frequently been the origin both of wounded arteries, and of pricks in " the nerves and tendons. So that as the bazard of the praaice, whenever " it is attentively confidered, muft at once appear evident, and as the fuppofed " inconveniencies arifing from a contrary mode of operating is effectually " prevented by the ufe of the fpear pointed lancet, all juch rifks therefore " fhould be carefully avoided.

[^8]:    " But although a very ordinary degree of caution would eafily prevent " every occurrence of this nature, and although, when accidents of this kind " do happen, the furgeon is almoft in every infance to blame; yet expe" rience has on diferent occafions evinced, that, either from the want of " attention, or from the operator not being pofeffed of a fufficient degree. " of fteadinefs, however eafily fuch inconveniencies ought to be prevented, yet " ftill they do frequently occur. Nerves, and even tendons, are fometimes " pricked, and the dreadful train of fymptoms which fuch actions com" monly produce are almoft fure to fucceed.
    " It fometimes happens immediately on the introduction of the lancet, " that the patient complains of a moft exquifite degree of pain; and when " this occurs, we may reft affured that either a nerve or tendon has been " wounded. On fome occafions, by proper management, fuch as eva" cuating a confiderable quantity of blood at the orifice newwly made, by " keeping the part at perfect reft, and preferving the patient in as cool a

[^9]:    " goes on to increafe, and proves during the whole courfe of the ailment a * fource of conftant diftrefs to the patient. The fullnefs and hardnefs in "the lips of the wound begin to increafe, and the fwelling in the neigh" bouring parts gradually extends over the whole member; from the foot " upwards over the thigh, when the operation has been done in the lower "extremity; and from the elbow down the fore-arm, and along the bumeras " over to the pecioral mufcle and other contiguous parts, when the accident " has occurred at the ufual place of blood-letting in the arm.
    "Such inflances indeed are not to be confidered as frequent occurrences; " but they happen often enough to convince us of the neceffity of very " great caution in this operation. In the courfe of my experience, I have " known feveral inflances where the confequences of blood-letting have prov-

[^10]:    * I am fill unwilling to forfake this favourite joke; though I begin now to fear, that, like Puff's morning gun, it has been too often fired off,

[^11]:    * Vide page 293.

[^12]:    * Vide Hiftory of Mexico, tranflated from the Italian by Mr. Cullen.

[^13]:    * " A very curious inftrument which Mr. Bell has invented for cutting for the ftone with, which he names Bell's Conductor-or Director-but it is grown rufty.

[^14]:    " wound, I have known it more than once happen, that portions of inteftine " have paffed out at the opening in the tendon, and remain protruded for " a confiderable time without being noticed; fo that the practice ought to " be entirely exploded!! !"

[^15]:    * " It is under the tendon or ligament that the parts compofing a cru" ral hernia defcend. On fome occafions they pafs immediately over the " femoral artery and vein; on others, they are found on the outfide of " thefe veffels; but more frequently they lie on the infide, between them " and the os pubis.
    "As the protrufion of any of the abdominal contents produces in this " fituation nearly the fame fet of fymploms as occur in cafes of inguinal her" nia, the method of treatment recommended in that Species of the difeafe " is alfo applicable bere.
    "When, therefore, in the femoral hernia, fymptoms of Arangulation oc" cUR, we muft put all the remedies in practice already advifed for the in" guinal rupture."
    $\dagger$ " When the contents of the tumour can be reduced without the ne" ceffity of dividing the ligament, the patient is thereby faved from a great "deal of hazard, as from the particular fituation of the Spermatic veffels

[^16]:    $\dagger$ Critical Inquiry into the Prefent State of Surgery.

[^17]:    *This conductor of Mr. Benjamin Bell's is a queer inftrument for cutting for the ftone. He makes a proclamation about it, and fome other inrentions of his, towards the end of this book.

[^18]:    - The Roman fchool boys, when they could not recite their beft leffon, the "Verba morituri catonis," were wont to anoint their eye-lids with oil to make them fore.
    † "Qux pater adductis fudans audiret amicis."

[^19]:    * I here correct my quotation. Proud of the honour I have of recording Mr. Bell's fucceffes, I had magnified them in a former page, faying 365 , in place of 165 .

[^20]:    * "Do, dear Denjamin, give it another turn upon the anvil."

[^21]:    * " In a few cafes we find thefe two varieties of hydrocele exifting af " the fame time in the fame patient. In this cafe the ferum, although col-
    " lected in two diffind cy/t, gives the appearance of one uniform tumour; " and a fluctuation is diftinctly felt from one end of it to the other. But, " in any inftance that I have feen of this combination, the tumour has been " fomewhat contracted, having rather a lefs diameter at that part where " the two collections are feparated from each other; fo that, where this " appearance takes place, we may, in general, fufpect, that the ferum is " colietied in two diflina bags. This is not always indeed the cafe, for oc" cafionally I have met with it where the difeafe was fixed in the tunica "vaginalis alone."

[^22]:    * Vide Earle on Hydrocele.
    $\dagger$ " When inflammation excited by an injection goes too far, and with " whatever care the operation is done this fometimes happens, the diftrefs " produced by it is fevere. Befides the pain arifing from the inflamma-

[^23]:    * "I have now performed this operation in one hundred and fixty-five " cafes, and in every variety of age, from the third to the feventy-fifth " year : not one of the number has either died or been in danger; nor has " the difeafe returned in any of them. In various inflances, at firtt, the " inflammation, as I have obferved above, arrived at a confiderable height; " but not in a fingle inftance, fince the operation has been done in the " manner I have mentioned."
    $\dagger$ Vide Duncan's Medical Commentary.

[^24]:    * " From the beft information that I have been able to procure, it ap" pears, that, although, in many, a complete cure is obtained, yet that " the difeafe returns early, that is, in the fpace of a few weeks, in a

[^25]:    * Page 156.

[^26]:    * Caledoaian Mercury, Thurfday, April 12. 1798.-A true Copy.

[^27]:    * Vol. III. p. 121.

[^28]:    * Page 43 .
    $\dagger$ Page 44.

[^29]:    * Page 45 .
    + Paflim.

[^30]:    * Page 37.

[^31]:    * Page 67.

[^32]:    * Page 76.

[^33]:    * Vol, III. page 3or.

[^34]:    * Page 104.
    $\dagger$ Page ro6.

[^35]:    * Page 84 .
    + Ib. 84 .

[^36]:    * Page 201. Vol. VI. $\quad+$ Page 256. $\ddagger$ Page 227. $\$$ Page 282.

[^37]:    ${ }^{*}$ Page 315.

[^38]:    * Page 297.

[^39]:    *. Page 113.

[^40]:    * Page 128.

[^41]:    * Vide No. I. page 30.

[^42]:    * B. G. a Portus.-Defence of the experiments of Paracelfus.

[^43]:    * "Que nous ne façions la faulte que feroit celuy qui calomnieroit un " autre pour avoir dit, que un oignement feroit compofè de cire \& de gal" banum, alleguant qu'il auroit obmis à dire le feu \& le vafe, fans lefquels " on ne fçauroit mefler lefdites drogues."

[^44]:    * Preface, page 10.

[^45]:    * Page 98. Vol. IV.

[^46]:    * Vide Benjamin Bell's Syftem of Surgery, Vol. IV. p. 257 .

